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**Federal Aviation
Administration**

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Regulatory Support Division

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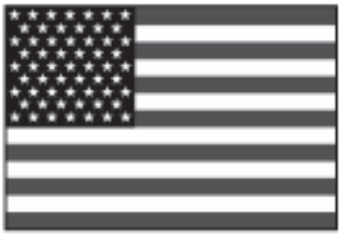
AVIATION MAINTENANCE ALERTS



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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC 20590

AVIATION MAINTENANCE ALERTS

The Aviation Maintenance Alerts provide a common communication channel through which the aviation community can economically interchange service experience and thereby cooperate in the improvement of aeronautical product durability, reliability, and safety. This publication is prepared from information submitted by those who operate and maintain civil aeronautical products. The contents include items that have been reported as significant, but which have not been evaluated fully by the time the material went to press. As additional facts such as cause and corrective action are identified, the data will be published in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported via Malfunction or Defect Reports. Your comments and suggestions for improvement are always welcome. Send to: FAA; ATTN: Designee Standardization Branch (AFS-640); P.O. Box 25082; Oklahoma City, OK 73125-5029.

SUSPECTED UNAPPROVED PARTS NOTIFICATIONS (UPNs)

The FAA's Suspected Unapproved Parts Program Office, AVR-20, has issued the following three Unapproved Parts Notifications (UPNs). They are reprinted for your information.

SUSPECTED UPN NO. 2002-00044

UNAPPROVED PARTS NOTIFICATION
NO. 2002-00044
JULY 1, 2002

SUSPECTED UNAPPROVED PARTS PROGRAM OFFICE, AVR-20
45005 AVIATION DRIVE, SUITE 214
DULLES, VA 20166-7541

UPNs are posted on the Internet at:
http://www.faa.gov/avr/sups/upn.cfm

Published by: FAA, AIR-140, P.O. Box 26460, Oklahoma City, OK 73125

AFFECTED ACCESSORY
EMERGENCY INFLATABLE LIFE RAFTS.

PURPOSE
The purpose of this notification is to advise all aircraft owners, operators, maintenance organizations, manufacturers, and parts distributors regarding the improper maintenance that C&M Marine, Inc., performed on emergency inflatable life rafts.

BACKGROUND
Information received during a Federal Aviation Administration (FAA) suspected unapproved parts investigation revealed that C&M Marine, Inc. (C&M), a former FAA-certificated repair station (Air Agency Certificate No. SX1R496K), located at 4585-C Claire Chennault, Addison, TX 75001, improperly maintained and approved for return to service emergency inflatable life rafts. C&M was previously authorized to repair, inspect, pack, and overhaul emergency inflatable survival equipment

(rafts, vests, and escape slides); repair and leak-test oxygen masks, oxygen bottle/cylinders, and fire extinguisher bottle/cylinders; inspect and test Emergency Locator Transmitters and batteries; and repair seat belts and shoulder harnesses.

Evidence indicates that C&M did not perform maintenance on life rafts in accordance with the current manufacturers' maintenance manuals or other data approved by the Administrator. C&M returned to service life rafts with improper seam leak repairs in which a manufacturer's prescribed air retention test had not been met. Evidence also indicates that during the period January to March 2000, C&M falsified entries on work orders attesting to work allegedly performed.

One life raft manufacturer observed the following non-conformities and discrepancies in C&M's procedures when servicing the manufacturer's life rafts:

(1) Tangled sea anchor line packed between folds.
(2) Expired survival equipment items not replaced.
(3) Damaged survival equipment items installed.
(4) Life raft packed with incomplete survival equipment.
(5) Water-activated battery (manufactured in January 1976) installed.
(6) Protective foam not installed over inflation system.
(7) Valise laces not trimmed after life raft sizing operation.
(8) Life raft canopy not properly arranged.
(9) Broken life raft oars.

RECOMMENDATION

Aircraft owners, operators, maintenance organizations, manufacturers, and parts distributors should inspect their aircraft, aircraft records, and/or parts inventories for emergency inflatable life rafts maintained or approved for return to service by C&M. Verification should be conducted independently of information provided on any work order or return-to-service entry. You should take appropriate action if any of these life rafts have been installed in an aircraft. If any existing inventory includes these life rafts, the FAA recommends that you quarantine the equipment to prevent installation on an aircraft until a determination can be made regarding each life raft's eligibility for installation.

FURTHER INFORMATION

Further information concerning this investigation and guidance regarding the above-referenced life rafts may be obtained from the FAA Flight Standards District Office (FSDO) given below. The FAA would appreciate any information concerning the discovery of the above-referenced equipment from any source, the means used to identify the source, and the action taken to remove the item from service.

This notice originated from the Dallas FSDO, 3300 Love Field Drive, Dallas, TX 75235, telephone (214) 902-1800, fax (214) 902-1872; and was published through the FAA Suspected Unapproved Parts Program Office, AVR-20, telephone (703) 661-0580, fax (703) 661-0113.

SUSPECTED UPN NO. 2002-00073

UNAPPROVED PARTS NOTIFICATION
NO. 2002-00073
JULY 1, 2002

SUSPECTED UNAPPROVED PARTS PROGRAM OFFICE, AVR-20
45005 AVIATION DRIVE, SUITE 214
DULLES, VA 20166-7541

UPNs are posted on the Internet at:
http://www.faa.gov/avr/sups/upn.cfm

Published by: FAA, AIR-140, P.O. Box 26460, Oklahoma City, OK 73125

AFFECTED ENGINES
Honeywell/AVCO Lycoming LF507 series and ALF502 series turbine engines.

PURPOSE
The purpose of this notification is to advise all aircraft owners, operators, maintenance organizations, manufacturers, and parts distributors regarding scrap parts reported stolen from a repair facility.

BACKGROUND
Honeywell UK Limited, located at 65 President Way, Luton, Beds, United Kingdom LU2 9NB, reported to the Federal Aviation Administration (FAA) that on January 18, 2002, numerous scrap parts were stolen from the Honeywell repair facility. The following parts had been determined to be scrap and were awaiting mutilation at the time of the reported theft. Honeywell has indicated that the possibility exists that the parts may be offered for sale on the open market.

STOLEN SCRAP PARTS

Description	Part No.	Engine Model Applicability	Serial No.	Engine Serial No./ LFO-
Fan Disk	2-043-002-11	507 & 502	6472	5122
Fan Disk	2-043-002-11	507 & 502	6519	5153
Fan Disk	2-043-002-11	507 & 502	M402537	5618
Supercharger Disk	2-043-004-07	502 Only	201	5043
Supercharger Disk	2-043-004-07	502 Only	335015	4025
Disk-4th Stage	2-100-042-10	507 & 502	SC53213	5332
Disk-5th Stage	2-100-043-10	507 & 502	SC53150	5332
Disk-6th Stage	2-100-044-08	507 & 502	SC53255	5332
Disk-7th Stage	2-100-045-09	507 & 502	SC53157	5332
Spacer	2-100-047-13	507 & 502	673	7234

Spacer	2-100-047-13	507 & 502	269	5332
Spacer	2-100-048-14	507 & 502	1077	7234
Spacer	2-100-048-14	507 & 502	1078	7234
Spacer	2-100-048-14	507 & 502	1292	7234
Spacer	2-100-048-14	507 & 502	637	5332
Spacer	2-100-048-14	507 & 502	635	5332
Spacer	2-100-048-14	507 & 502	612	5332
Spacer	2-100-052-28	507 & 502	3411	7234
Spacer	2-100-052-28	507 & 502	322	5332
Impellor	2-100-180-22	507 & 502	458339	5153
Impellor	2-100-180-22	507 & 502	M369203	5236
Impellor	2-100-180-22	507 & 502	419378	5767
Impellor	2-100-180-22	507 & 502	CRU189	5815
Comp Shaft	2-101-238-04	507 & 502	911	5303
Comp Shaft	2-101-238-04	507 & 502	81	5618
Comp Shaft	2-101-238-04	507 & 502	193	5814
Comp Shaft	2-101-238-04	507 & 502	1309	5815
Disk-3rd Stage	2-101-263-07	507 & 502	SC53270	5332
Disk-1st Stage	2-101-331-04	507 & 502	M421573	5983
Disk-1st Stage	2-101-331-09	507 & 502	SC11800	7234
Disk-2nd Stage	2-101-332-01	507 & 502	531	5122
Disk-2nd Stage	2-101-332-01	507 & 502	M364557	5153
Disk-2nd Stage	2-101-332-01	507 & 502	A173	5303
Disk-2nd Stage	2-101-332-01	507 & 502	A231	5332
Disk-2nd Stage	2-101-332-01	507 & 502	M349020	5541
Disk-2nd Stage	2-101-332-01	507 & 502	M6545594	5618
Spacer	2-103-024-07	507 & 502	2751	7234
Spacer	2-103-024-07	507 & 502	273	5332
T1 Disk	2-121-051R35	507 & 502	M333128	5815
T1 Disk	2-121-051R55	507 & 502	M333365	5332
T2 Disk	2-121-058-29	507 & 502	961365101934	5815
T2 Disk	2-121-058-29	507 & 502	M457369	7465
T2 Disk	2-121-058-29	507 & 502	M435874	5303
T2 Disk	2-121-058-29	507 & 502	98136310331	7234
T2 Disk	2-121-058-38	507 & 502	991356100166	7435
Turbine Spacer	2-121-071-36	507 & 502	MSN410296	5815
Turbine Spacer	2-121-071-36	507 & 502	MSN417701	5983
Turbine Spacer	2-121-071-42	507 & 502	MSN458978N	7435
Turbine Spacer	2-121-071-52	507 & 502	M404930	5332
Turbine Spacer	2-121-075-28	507 & 502	MSN436384	5815
Turbine Seal Plate	2-121-075-28	507 & 502	MSN430123	7234
4th Rotor Disk	2-141-057-R60	507 & 502	C137	5303
3rd Rotor Assy	2-143-030-22	507 & 502	C321	5332

RECOMMENDATION

Regulations require that type-certificated products conform to their type design. Aircraft owners, operators, maintenance organizations, manufacturers, and parts distributors should prevent the installation of these engine parts on type-certificated products.

FURTHER INFORMATION

Further information concerning this notification and guidance regarding the above-referenced parts may be obtained from the FAA Flight Standards International Field Office referenced below. The

FAA would appreciate any information concerning the discovery of these parts from any source, the means used to identify the source, and the actions taken to remove the parts from aircraft and/or stock.

This notice originated from the FAA Flight Standards International Field Office, Gatwick, England, telephone 011-44-1293-573933, fax 011-44-1293-573992; and was published through the FAA Suspected Unapproved Parts Program Office, AVR-20, telephone (703) 661-0580, fax (703) 661-0113.

SUSPECTED UPN NO. 2002-00120

UNAPPROVED PARTS NOTIFICATION
NO. 2002-00120
JULY 25, 2002

SUSPECTED UNAPPROVED PARTS PROGRAM OFFICE, AVR-20
45005 AVIATION DRIVE, SUITE 214
DULLES, VA 20166-7541

UPNs are posted on the Internet at:
http://www.faa.gov/avr/sups/upn.cfm

Published by: FAA, AIR-140, P.O. Box 26460, Oklahoma City, OK 73125

AFFECTED PARTS
Parts maintained and approved for return to service by Renzco, Inc.

PURPOSE
The purpose of this notification is to advise all aircraft owners, operators, manufacturers, maintenance organizations, and parts distributors regarding maintenance performed by Renzco, Inc. (Renzco), a former Federal Aviation Administration (FAA)-certificated repair station located at 1637 Wellesley Avenue, Los Angeles, CA 90025.

BACKGROUND
Information received during an FAA suspected unapproved parts investigation revealed that Renzco performed work for which it was not rated. Renzco was issued Air Agency Certificate No.

RE7R330J with Class I, II, III, and IV instrument ratings on November 22, 1993. Renzco was authorized to diagnose instrument malfunctions; maintain and alter instruments, including installation and replacement of parts; and inspect, test, and calibrate instruments.

Evidence indicates that Renzco has performed maintenance -- and approved for return to service -- parts and hardware outside its Class I, II, III, and IV instrument rating. Documentation obtained during the investigation includes copies of FAA Form 8130-3 (Airworthiness Approval Tags). These forms indicated that Renzco approved parts for return to service after having performed work for which it was not rated by its Operations Specifications and Air Agency Certificate.

Following this notification is a partial list of parts that may have been improperly approved for return to service by Renzco.

RECOMMENDATION

Regulations require that type-certificated products conform to their type design and be properly maintained. Aircraft owners, operators, manufacturers, maintenance organizations, and parts distributors should inspect their aircraft and/or parts inventory for any parts approved for return to service by Renzco for which it was not rated. You should take appropriate action if any of these parts have been installed on an aircraft until a determination can be made regarding each part's eligibility for installation.

FURTHER INFORMATION

Further information concerning this investigation and guidance regarding the above-referenced parts may be obtained from the FAA Flight Standards District Office (FSDO) shown below. The FAA would appreciate any information regarding the discovery of the above-referenced parts from any source and the action taken to remove them from inventory or service.

This notice originated from the Los Angeles FSDO, 2250 East Imperial Highway, Suite 140, El Segundo, CA 90245, telephone (310) 215-2150, fax (310) 645-3768; and was published through the FAA Suspected Unapproved Parts Program Office, AVR-20, telephone (703) 661-0580, fax (703) 661-0113.

Class II Parts

Name	Part Number	Serial Number	Inspection Date	Function	Quantity
Windshield	5-89354-3129	98244H6037	03-16-99	Inspected	1
Windshield	5-89354-3129	97245H4585	03-16-99	Inspected	1
PSU	65B50255-2138	None	09-13-00	Overhauled	5
Door Assy	AWD7883-2	None	09-11-00	Inspected	1
Leading Edge	3-24132-502	5683	08-16-00	Inspected	1
Leading Edge	3-24132-502	5343	08-16-00	Inspected	1
Transformer	6430A	48688	01-20-00	Overhauled	1
Valve	369646-75	4442	10-17-01	Inspected	1
Nozzle/Turb	1-110-710-06	6G0047	06-23-00	Inspected	1

Class III Parts

Name	Part Number	Serial Number	Inspection Date	Function	Quantity
Plug	905-10	None	10-18-01	Inspected	2
Nut	139321	None	10-18-01	Inspected	10
Bearing	762-3A	None	10-18-01	Inspected	2
Seal Prop Shaft	23034555	None	10-18-01	Inspected	10
Tube	5007283	None	10-18-01	Inspected	8
Rivet	00X3-2NICK	None	10-17-01	Inspected	100
Gasket	376322	None	10-17-01	Inspected	6
Elbow	6846213	None	10-17-01	Inspected	1
Hose Assy	AHO73629	None	09-19-01	Inspected	1
Reducer	MS24397D2	None	09-19-01	Inspected	1
Switchbox	MS25253-2	None	09-19-01	Inspected	1
Screw	NAS428-4-5	None	09-10-01	Inspected	12
Plate Valve	696277-1	None	09-10-01	Inspected	1
Housing	696753-1	None	09-19-01	Inspected	1
Stud	75176	None	09-19-01	Inspected	1
Screw	S9420H-26	None	09-19-01	Inspected	8
Sleeve	3602218-1	None	09-19-01	Inspected	1
Brake Pin	2603103	None	09-11-00	Inspected	30
Packing	151387	None	09-11-00	Inspected	30
Nut	FN922-524	None	09-11-00	Inspected	60
Insulator	2608845	None	09-11-00	Inspected	30
Screw	AN115913	None	12-28-01	Inspected	62
Bolt	AN102906	None	12-28-01	Inspected	382
Roller Spur	6878485/SFRH103-47		12-28-01	Inspected	2
Washer Key	189156	None	12-28-01	Inspected	10
CirClip	G266975	None	12-28-01	Inspected	10

AIRPLANES

BEECH

Beech; Model F33A; Bonanza; Landing Gear Defect; ATA 3230

After landing safely, the pilot stated the landing gear failed to extend during the approach. He used the emergency system to get the gear down and locked.

A maintenance technician placed the aircraft on jacks and conducted a gear retraction test. During the test, he discovered the dynamic relay (Eaton P/N SM50D7) was stuck in the “up” position and prevented the gear from extending. After replacing the dynamic relay, the landing gear system operated properly.

Given the relatively short time in service for the relay, the submitter suggested that technicians be suspicious when they encounter seemingly unrelated gear problems.

Part total time-518 hours.

Beech; Model F33A; Bonanza; Poor Engine Operation; ATA 7310

After returning from a flight, the pilot related that the engine ran poorly at high altitude; however, it "smoothed out" at lower altitude.

A maintenance technician performed an engine operational test to investigate the anomaly. He determined the engine fuel flow divider (TCM P/N 631427-2A20) delivered fluctuating fuel flow to the engine. He removed and replaced the fuel flow divider, and a ground test and flight test confirmed the problem was solved.

The FAA Service Difficulty Program data base contains three additional similar reports involving like aircraft.

Part total time-318 hours.

Beech; Model 58; Baron; Landing Gear Motor Defect; ATA 3230

During a scheduled inspection, a technician discovered the landing gear retraction motor brushes were worn beyond acceptable limits.

The technician ordered a new set of brushes for the retraction motor (P/N 58-380090-1) using the aircraft serial number to ensure he would receive the correct brushes. Even so, it is possible to get a set of brushes that are not compatible with the particular motor being repaired.

The submitter stated that installation of incorrect brushes in the retraction motor could result in motor failure. He recommended that technicians exercise extreme caution when ordering and installing brushes in the retraction motor to ensure the parts are compatible.

Part total time not reported.

Beech; Model 58; Baron; Unsecured Cabin Entry Door; ATA 5210

The pilot reported that during takeoff, the cabin entry door "popped" open at the top edge. He returned to the airport immediately and landed safely.

A technician inspected the door assembly and discovered severe wear on the upper latch (P/N 35-410456-5), door handle assembly (P/N 35-5050-1P), and the upper door latch channel assembly (P/N 002-430000-109). After he replaced the worn parts, the door functioned properly.

The submitter recommended giving close attention to these parts during inspections and maintenance.

Part total time not reported.

Beech; Model 60, A60, B60; Duke; Split Electrical Wiring Insulation; ATA 2460

During an accident investigation, an inspector discovered the 6-guage wire, used to attach the generator, had numerous lateral splits in the wire's insulation.

The splits in the wiring insulation appear as small fine dark scratches on the wiring outer covering and run lengthways with the wire. The manufacturer's maintenance manual contains general wiring inspection criteria. However, it does not specifically address the problem of insulation "splitting." The wire type involved in this accident was M22759/7, and it might be used on other aircraft makes and models.

The submitter recommended inspecting the starter and generator wires at least once a year. If any insulation splitting is discovered, the wire should be replaced.

Part total time not reported.

Beech; Model E90; King Air; Elevator Structural Defect; ATA 5521

While conducting a scheduled inspection, a technician discovered several structural defects on the elevator assembly.

The left elevator (P/N 50-610000-487) had cracks on the inboard rib (P/N 50-610000-355), rib doubler, and inboard main spar flange (P/N 50-610000-387). The cracks were mainly located in the bend radii in the area where the inboard end of the elevator torque tube is attached. The cracks varied in length from 1.3 inches on the spar flange to 3.5 inches around the rib circumference, and they followed the shape of the torque tube attachment casting.

The submitter believes this damage may be the result of a difference in the "neutral" position of the left and right elevators or possibly trim tab flutter. There was a "slight split" between the left and right side elevators at the "neutral" position, and the trim tab actuator had excessive "end play."

The submitter found two other like aircraft in his fleet with similar defects. He cautioned all technicians to closely inspect this area at every opportunity.

Part total time-6,851 hours.

Beech; Model 100; King Air; Electrical System Anomaly; ATA 2400

After returning from a flight, the pilot reported he lost electrical power to the right side of the instrument panel. When he placed the landing gear in the "down" position, it failed to extend. He used the emergency system to get the gear down.

The pilot discovered the "main bus circuit breakers" were open. After he reset the circuit breakers, electrical power was restored to the instrument panel.

Maintenance personnel conducted landing gear and electrical systems operational tests without finding a cause for this discrepancy. They believe the problem was caused by an unknown electrical power surge that caused the circuit breakers to open.

Part total time-7,568 hours.

Beech; Model 200; King Air; Main Landing Gear Defect; ATA 3230

During a landing gear retraction test, a technician discovered the left main landing gear was defective.

The jackscrew nut assembly for the left main gear retraction actuator (P/N 99-810057-652) was broken. The threaded screw was disconnected from the chrome tube and allowed the gear to fall down but not lock down.

The submitter discovered the jackscrew nut weldment was defective. Beech issued Service Bulletin (SB) 32-3433, which describes this type of defect and gives guidance for correction. In this case, the technician replaced the retraction actuator in accordance with SB 32-3433.

Part total cycles-1,123.

Beech; Model 1900D; Airliner; Vertical Stabilizer Security; ATA 5530

During a scheduled inspection, a technician discovered the vertical stabilizer was loose.

The forward spar, lower attachment point, and upper bolts (P/N EWB22-5) required tightening. The technician retorqued the bolts in accordance with the Beech Maintenance Manual.

This report is significant because the FAA Service Difficulty Program data base contains nine similar reports on like aircraft. All concerned personnel are urged to check the vertical stabilizer security at every opportunity.

Part total time-12,945 hours.

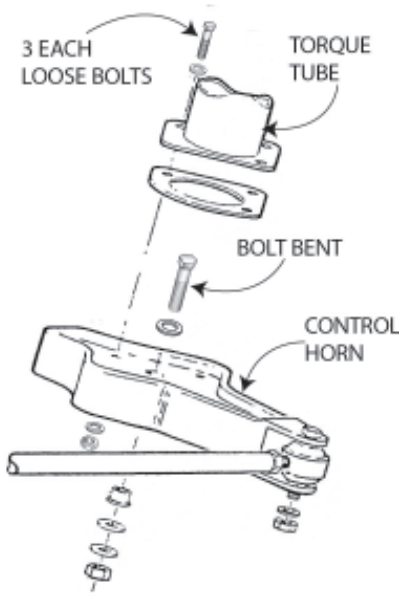
Beech; Model 1900D; Airliner; Rudder Control System Defects; ATA 2720

While conducting a scheduled inspection, the inspector discovered a discrepancy in the rudder control system.

The rudder torque tube mount bolts were loose, and the control horn mount bolt (P/N AN175-17A) was bent. (Refer to the illustration.)

The submitter did not offer a cause for this problem. He recommended giving this area special consideration during inspections and maintenance.

Part total time-3,237 hours.



CESSNA

CORRECTION TO AD NUMBER
Cessna; Model A185F; Skywagon; Corrected AD Number

In the August 2002, edition of this publication we included an article on page 6, which referenced an incorrect Airworthiness Directive (AD) number.

The AD number given was 2001-23-02, and the correct AD reference is 2001-23-03. We regret any inconvenience or confusion caused by this error. Also, we appreciate the studious reader who caught and reported the mistake.

Cessna Model 172 (and Other Single-Engine Models); Skyhawk; Aileron Cable Corrosion Inspection; ATA 2710-2711

The following article was submitted by the FAA Aircraft Certification Office (ACE-118W), located in Wichita, Kansas. *(The information is reprinted as it was received.)*

Control cables are a critical component of most aircraft flight control systems. Cables are usually manufactured from carbon steel or stainless steel and are lubricated during the manufacturing process. Both the carbon steel and the stainless steel types of cable are susceptible to the effects of corrosion, especially if the lubrication is wiped away by fairleads, stuck pulleys, or is oxidized away over long time periods. The presence of moisture on the cables accelerates the removal of lubrication and also facilitates corrosion.

There have been reports of corrosion in Cessna Model 172 aileron control cables in the area at the top of the rear doorpost. Corrosion is most likely in older airframes stored outside. This part of the control cable is difficult to inspect. The latest Cessna Maintenance Manual (P/N 172RMM07, chapter 27-00-01 and 5-10-01) describes how to remove the cable and inspect it for corrosion. A partial inspection, while not as complete as removing the cable, will give some indication of a corroded cable. Gain access to the area through the zipper in the headliner. Rotate the control wheel fully to present the maximum length of cable for inspection. Rotate the wheel in the direction to roll the airplane right for the left side left for the right side. If working alone, it may be necessary to use a seat belt to hold the control wheel at full deflection.

Corrosion will be indicated by broken wires or powdered, oxidized metal on the surface of the cable. Examine the cable by rubbing it with a soft white cotton cloth. If the cloth snags, broken wires are present. The cloth will also wipe away some of the powdered, oxidized metal, producing a change in the surface color of the cable and of the cloth.

Examine the opposite side of the airframe, with the control wheel rotated the opposite direction.

NOTE: A fatal aircraft accident, involving a Cessna, Model 172M, was attributed to a corroded left aileron cable (P/N 0510105-224) that failed. The cable broke at the point where it passed over the pulley (P/N S378-4) at the top of the right doorpost. At this location, the cable makes a right angle change of direction from vertical upward inside the doorpost to horizontal across the top of the cabin. The effects of corrosion also damaged the bearing on the aileron pulley.

Cessna; Model 172S; Skyhawk; Inoperative Avionics Cooling Fan; ATA 2510

The aircraft owner delivered the aircraft to a maintenance facility and reported the avionics cooling fan was inoperative. He stated there was an electrical burning odor, and the cooling fan circuit breaker had opened on several occasions.

The technician inspected the cooling fan electrical system. He discovered the fan wire bundle had chafed against the back of the avionics buss and penetrated the power wire insulation. The circuit breaker contacts were “melted” and severely heat damaged. He also discovered the defective cooling fan circuit breaker was rated at 5 amps instead of the 1 amp circuit breaker recommended by the manufacturer. He replaced the circuit breaker and repaired the wire bundle, securing it to provide adequate clearance from the avionics buss and the circuit breaker.

The submitter recommended that all operators of "new model aircraft (172)" check for properly secured wire bundles in the area of the avionics buss.

Part total time not reported.

Cessna; Model 208B; Caravan; Cargo Door Security; ATA 5230

After a very short flight, the pilot stated the cargo door came open just as the aircraft left the runway during takeoff.

A maintenance technician investigated the incident and discovered the cargo door would pop open when minimal pressure was applied. The door spring tension on the upper door handle was insufficient to produce positive locking when the latch was engaged. After adjusting the spring tension, he performed an operational test; and the door latching mechanism functioned properly.

The submitter cautioned technicians to check the cargo door spring tension in accordance with the manufacturer's technical data during scheduled inspections.

Part total time not reported.

Cessna; Model 208B; Caravan; Defective Wing Flap Cable; ATA 2750

During a scheduled inspection, a technician discovered a wing flap cable was defective.

The technician found several strands broken on the right flap outboard cable (P/N 2660001-105). The damaged area was at the swaged terminal that connects the cable to the outboard end of the flap. Due to the cable strand damage, he replaced the cable assembly. He did not give a cause for this defect. However, the defect could have occurred where the cable adjacent to the cable terminal flexes. Over a long period of time, the flexing may have caused the metal to work harden and the cable strands to separate.

Maintenance technicians should give this, as well as all other flight control cables, close attention at every opportunity.

Part total time-2,998 hours.

Cessna; Model T210N; Centurion; Engine Control Failure; ATA 7602

During takeoff, the pilot noticed the engine operation was rough. He continued the takeoff and landed immediately at the departure airport. He summoned maintenance personnel to troubleshoot the problem.

The technician discovered the engine mixture control cable (P/N 9862066-1) had failed at the crimp swivel joint on the engine fuel control. This left only the rod-end and a small portion of the mixture cable attached to the fuel control. Due to this condition, the fuel mixture supplied to the engine was too lean for proper operation during takeoff.

This mixture control cable had not attained the 1,500-hour replacement time; and the submitter recommended checking the cables thoroughly for condition and proper operation during scheduled inspections and maintenance.

Part total time-1,000 hours.

Cessna; Model T210N; Centurion; Horizontal Stabilizer Loose; ATA 5510

While the aircraft was in the shop for an annual inspection, a technician noticed the horizontal stabilizer was loose!

The technician discovered the aft mounting reinforcement bracket (P/N 1232624-1) was broken on both sides, and the forward attachment fitting was loose. During the repair process, he installed a Cessna repair kit (SK 210-126). This aircraft was operated from a sod landing strip, which may have imposed unusual vibration and stress to the aircraft empennage.

The submitter recommended checking the horizontal stabilizer closely for looseness during inspections, especially preflight checks.

Part total time-4,202 hours.

Cessna; Model 414A; Chancellor; Defective Wing Attachment Fitting; ATA 5740

While preparing for an annual inspection, a technician removed the wing root panels and noticed severe structural damage.

The upper rear inboard wing spar (P/N 0822600-39) attachment bracket had been consumed by the effects of corrosion and was in danger of immediate failure! (Refer to the illustration.) Most of this aircraft's life had been spent parked outside. The submitter believes this was the major factor causing this defect. He speculated that corrosive contaminates entered through or around the panels and remained in contact with the attachment bracket.

The submitter made an important point concerning this finding. He observed that the state of this damage could not have progressed to the severity found since the last (or even more) scheduled inspections! It seemed evident that the aircraft had not been properly inspected or maintained in the past!

Part total time-5,835 hours.

Cessna; Model 421C; Golden Eagle; Engine Operational Roughness and Fuel Leak; ATA 7310

After landing, the pilot reported experiencing roughness on the right engine and observed a fuel leak. He shut down the engine and made a safe precautionary landing.

While inspecting the engine, a technician located the fuel leak source at the number 5 cylinder fuel injection tube. The fuel injection tube was leaking where it attaches to the fuel manifold fitting. He found the solder joint at the flare ball end was cracked. He replaced the tube and conducted a leak check, which was satisfactory. He suspected that operational vibrations contributed to this defect.

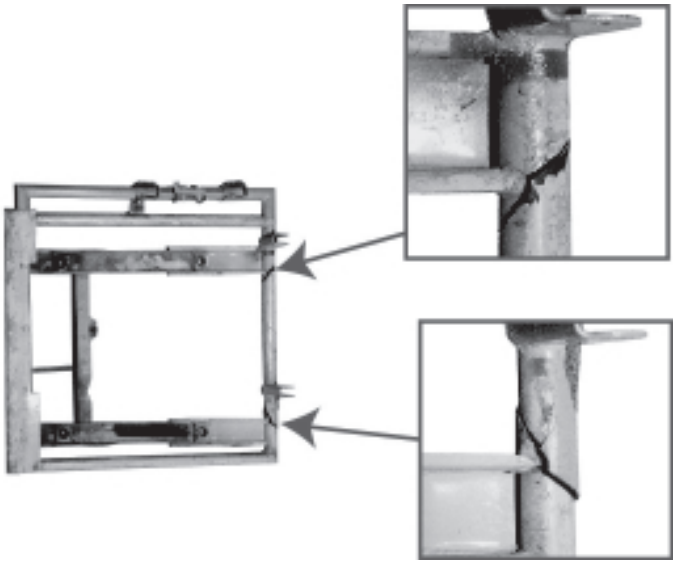
The submitter recommended closely checking both the fuel injector end fittings and the manifold end fittings for condition and leakage during scheduled inspections and injector-system maintenance.

Part total time since overhaul-1,010 hours.

Cessna; Model 550; Citation; Cockpit Seat Structural Defect; ATA 2510

In conjunction with a scheduled inspection, a technician removed the cockpit seats for inspection.

While inspecting the seats (P/N 5519015-13), the technician discovered severe structural defects on the pilot's position seat frame. The upper portion of the seat base (P/N 5519009-21) was cracked where the seat back attaches. (Refer to the illustration.) He speculated that stress on the seat back caused metal fatigue and led to the frame assembly failure.



The FAA Service Difficulty Program data base contains two additional reports of similar defects. Supplemental Type Certificate (STC) ST01042WI contains a repair process for this defect. This defect could lead to separation of the seat frame tube and seat back failure. This problem deserves close attention and immediate repair.

Part total time not reported.

Cessna; Model 750; Citation; Fire Extinguishing System Defect; ATA 2620

While performing unrelated maintenance, a technician removed the auxiliary power unit fire extinguisher deployment tube.

The technician discovered the fire extinguisher tube (P/N 6758600-13) contained approximately 3 inches of water in the vertically mounted tube, and there was evidence of minor corrosion on the tube. He could not determine the source of the water but speculated it may have been produced by condensation over a long period of time.

Since the presence of water in the fire extinguishing tube could disable the system, it would be wise to remove and check vertically mounted tubes (and other tubes that may harbor water) for the presence of moisture during inspections.

Part total time-1,761 hours.

PIPER

Piper; Model PA 28R-201; Arrow; Defective Engine-Induction System; ATA 7160

While conducting a scheduled inspection, a technician discovered the engine air-induction system was defective.

The technician found the induction airbox (P/N 99047-000) door and the hinge assembly were bent. The deformity allowed unfiltered air into the engine air-intake system. He recommended that the manufacturer use more structurally substantial support for the hinge assembly and additional rivets that are larger in diameter.

The submitter reported finding similar defects on other like aircraft. The FAA Service Difficulty Reporting (SDR) Program data base contains two additional reports of airbox hinge failure.

Part total time-513 hours.

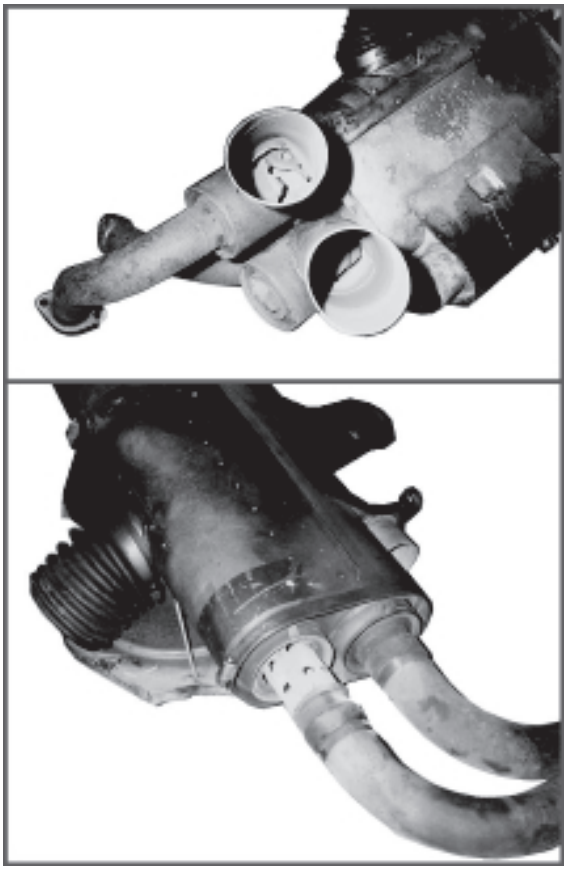
Piper; Model PA 28RT-201; Arrow; Defective Engine Muffler; ATA 7820

During an annual inspection, the technician discovered the aft engine muffler was defective.

The (twin) muffler assembly (P/N 67517-00) appeared to be distorted and was cracked adjacent to one of the steel exhaust tubes. Investigating further, the technician found that the muffler internal flame tubes were loose, broken, and could be removed by hand. (Refer to the illustration.)

The submitter recommended that all concerned personnel pay close attention to the engine exhaust system during inspections and maintenance.

Part total time-1,409 hours.



Piper; Model PA 28RT-201T; Turbo Arrow; Defective Avionics System; ATA 3110

A technician reported repeated failures of an avionics system component.

The technician stated, "Over the past month, he found several avionics master relays (P/N 150-905) with burned connections." He concluded that over time, the buss connections turn black and ultimately fail. This relay, and problem, may be present in 1978 through 1980 Piper Model PA 28 and PA 32 series aircraft.

The submitter recommended that technicians be aware of this problem and closely inspect the relay and terminal connections for evidence of burning or blackening.

Part total time not reported.

Piper; Model PA 31-350; Chieftain; Engine Exhaust System Defect; ATA 7810

During a scheduled inspection, a technician noticed an engine exhaust stain on the right engine turbocharger mount.

Inspecting further, the technician found the exhaust stain appeared to come from the junction of the turbocharger and the turbocharger transition assembly (P/N LW-12437). After removing the turbocharger assembly, he discovered the "divide" was cracked. The cracked "divide" caused the transition assembly to warp, leak exhaust gases, and create deposits on the mount.

Part total time-1,693 hours.

Piper; Model PA 31-350; Chieftain; Engine Failure; ATA 2800

After aborting a takeoff, the pilot stated, "The right engine failed during the takeoff run." While interviewing the pilot, the technician learned the pilot made a "rolling takeoff" immediately after turning onto the runway.

The technician inspected the aircraft and conducted an engine-operational test. The test did not reveal any discrepancies. It was his opinion the "rolling takeoff" after a left turn onto the runway caused the right wing fuel supply to concentrate at the outboard end of the tank. This left the engine fuel supply port uncovered and led to engine failure due to fuel starvation.

The submitter suggested that all operations personnel adhere to the published operational data and company policy concerning "rolling takeoffs" immediately after a turn.

Engine time since overhaul-774 hours.

Piper; Model PA 31T-620; Cheyenne II; Hydraulic System Leakage; ATA 2911

After a flight, a technician conducted a postflight inspection and noticed leaking hydraulic fluid in the area of the right engine.

Investigating further, the technician discovered the hydraulic fluid was coming from the engine-driven hydraulic pump (Model number 1213HBG-310). While checking for the exact source of the leak, he found a cracked spacer plate between the front and rear halves of the pump. He gave no cause for the cracked spacer and did not offer any further information.

Part total time not reported.

Piper; Model PA 32R-300; Cherokee Lance; Rudder Trailing Edge Cracks; ATA 5540

During a scheduled inspection, the inspector discovered several cracks on the rudder trailing edge skin.

All the cracks were located either adjacent to or near the rudder (P/N 65342-002) stiffener beads. Although the submitter gave no cause for these defects, the cracks may have resulted from operational vibration and/or flutter.

The submitter recommended the manufacturer consider using the "T-tail" design for the vertical stabilizer similar to the Lance Model.

Part total time-596 hours.

Piper; Model PA 34-200T; Seneca; Loose Fasteners; ATA 5513

While conducting a scheduled inspection, a technician discovered several loose fasteners on the horizontal stabilizers.

The rivets attaching the left and right stabilizer trim (P/Ns 95864-00 and –01) surface brackets were loose and "smoking." The brackets are used to attach the stabilizer trim push rods.

The submitter did not offer a cause for this defect. However, it would be wise to give these fasteners close attention at every opportunity.

Part total time-2,780 hours.

Piper; Model PA 46-310P; Malibu; Engine Exhaust System Defect; ATA 7810

After a flight, the pilot reported experiencing low manifold pressure (MAP), which slowly decreased from 25 inches MAP to 22 inches MAP with full throttle.

While inspecting the aircraft, a technician noticed exhaust gas stains in the right cylinder bank area. He discovered the engine exhaust system was broken adjacent to the turbocharger flange (P/N 654327). This failure caused inefficient turbocharger operation and the low MAP indication reported by the pilot.

The submitter did not speculate concerning the cause of this failure. However, it would be wise to closely inspect the engine exhaust system components at every opportunity.

Part total time not reported.

Piper; Model PA 46-350P; Malibu; Unusual Engine Propeller Movement; ATA 7120

Mr. David Snider, an Aviation Safety Inspector with the Dallas, Texas, FAA Flight Standards District Office (FSDO) interviewed the pilot of an aircraft involved in an accident. The pilot stated the nose landing gear collapsed when it contacted the runway during landing.

While investigating the accident, the inspector discovered the right side of the nose gear actuator aft-attachment point had separated from the engine mount assembly (P/N 81937-02) tube cluster. When the actuator separated, it impacted the engine firewall causing major damage and the collapse of the nose gear.

Piper has issued Service Bulletin (SB) 1103, which gives inspection criteria for the nose gear actuator/engine mount assembly. SB 1103 is applicable to certain serial numbers of PA 46-310P,

PA 46-350P, and PA 46-500RP model aircraft. Please consult SB 1103 for specific applicability. The instruction in SB 1103 allows for inspection at the next service event. However, Mr. Snider suggested that all operators of aircraft to which SB 1103 is applicable comply with the instructions immediately!

Part total time-1,835 hours.

HELICOPTERS

BELL

Bell; Model 212; Engine Oil System Failure; ATA 8550

This helicopter was operating on a fire-suppression mission. During a landing approach, the pilot noticed the master caution light was illuminated. He observed the number 2 engine oil pressure light was on, and the pressure gage was near zero. He followed the emergency checklist and landed the helicopter without damage or injury.

A technician noticed the right side of the helicopter was covered with engine oil and investigated to find the origin. He discovered the number 2 engine oil drain valve (P/N 209-062-010-001) came apart, and all the engine oil escaped. Four of the eight screws (P/N MS21090-10), used to secure the valve, backed out and allowed the valve to fall apart.

In researching the engine oil drain valve, the technician learned that two vendors supply replacements to Bell. One vendor uses screws with provisions for the application of safety wire. The other vendor uses screws with a self-locking nylon insert. In this case, the valve that failed had screws with the self-locking inserts installed. When a replacement drain valve is ordered, either type valve may be received.

The submitter sent the defective drain valve to a laboratory for analysis. The FAA and the operator will be present to witness the disassembly, inspection, and analysis of the drain valve. It is possible that an FAA Safety Recommendation will be forthcoming.

Part total time-753 hours.

Bell; Model 407; Possible Improper Bearing Installation; ATA 7261

Bell issued a recent technical publication, which was misinterpreted by maintenance personnel.

Bell Helicopter issued Technical Bulletin (TB) 407-02-35, dated January 25, 2002, which concerns installation of improved oil cooler hanger-bearing components.

Recently, while complying with TB 407-02-35, a helicopter operator's maintenance personnel installed the aft hanger-bearing bracket on the oil cooler blower shaft backward. This misinterpretation of the TB occurred on two separate aircraft. The installation was completed by two experienced technicians and inspected by two other experienced technicians.

The maintenance personnel involved indicated that they misinterpreted the instruction in TB 407-02-35 concerning the bracket installation. The improved bracket is installed in reverse of the original bracket.

The submitter suggested the manufacturer add a "CAUTION" to the text to clarify this point. Technicians complying with TB 407-02-35 should pay close attention to orientation of the bracket to ensure proper installation.

Part total time not applicable.

SCHWEIZER

Schweizer; Model 269C-1; Rotor Drive Missing Part; ATA 6310

While the helicopter was in the shop for a scheduled inspection and maintenance, a technician performed an engine compression test.

The technician discovered the "engine-turning tool" went into the lower pulley drive spline farther than it should. Investigating further, he discovered the engine drive shaft was improperly positioned in the lower pulley. After removing the belt-drive assembly, he examined the engine-mounted drive adapter and discovered the forward lower coupling bumper plug (P/N 77416) was missing. The coupling bumper plug is used to position the drive shaft in the engine and lower pulley for the belt drive. He inspected the engine end of the drive shaft and discovered the spline engagement was only approximately 20 percent with the drive shaft in the displaced position.

The submitter stated that this condition could lead to drive spline uncoupling and complete loss of rotor drive.

Part total time-1,565 hours.

POWERPLANTS AND PROPELLERS

TEXTRON LYCOMING

Textron Lycoming; Model IO-540-K1A5; Premature Failure; ATA 8530

This engine was being used in a Piper, Model PA 32-300 aircraft.

While conducting a scheduled inspection and engine oil change, a technician found ferrous metal slivers in the oil filter. He removed the number 1 and number 3 cylinders and discovered metal imbedded in the piston skirts and the cam lobe shared by the number 3 and the number 4 cylinder exhaust push rods. In addition, the number 3 and number 4 exhaust cam lobe and cam followers were severely pitted.

The submitter stated, "This was the second occurrence of a premature cam lobe failure found in a 12-month period on a like engine." The first engine was found defective at 386 operating hours. This engine displayed severe pitting and wear of an intake cam lobe.

This report contained no information concerning the origin of the metal contamination. However, the submitter contacted the engine manufacturer representative; and the case was still open at the time of this writing.

Part total time-496 hours.

Textron Lycoming; Model O-360; Magneto Drive Defect; ATA 7100

A technician installed two factory-remanufactured engines on a Piper PA44-180 aircraft. Shortly after the installation, he discovered a problem with the left engine magneto drive gear.

The technician discovered the left engine magneto drive gear (P/N LW-15659) was seized to the crankshaft bushing. The bushing was spinning in the crankshaft bore. Due to this finding, he checked the right engine and found the same condition. He removed both engines for further evaluation.

The submitter recommended that the manufacturer modify the engine design to provide positive lubrication to the magneto drive gear.

Part total time since factory remanufacture-219 hours.

AIR NOTES

SUBSCRIPTIONS

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ELECTRONIC VERSION OF MALFUNCTION OR DEFECT REPORT

One of the recent improvements to the AFS-600 Internet web site is the inclusion of FAA Form 8010-4, Malfunction or Defect Report. This web site is still under construction and further changes will be made; however, the site is now active, usable, and contains a great deal of information.

Various electronic versions of this form have been used in the past; however, this new electronic version is more user friendly and replaces all other versions. You can complete the form online and submit the information electronically. The form is used for all aircraft except certificated air carriers who are provided a different electronic form. The Internet address is:

http://av-info.faa.gov/isdr/

When the page opens, select “M or D Submission Form” and, when complete, use the “Add Service Difficulty Report” button at the top left to send the form. Many of you have inquired about this service. It is now available, and we encourage everyone to use this format when submitting aviation, service-related information.

SERVICE DIFFICULTY REPORTING PROGRAM

The objective of the Service Difficulty Reporting (SDR) Program is to achieve prompt and appropriate correction of conditions adversely affecting continued airworthiness of aeronautical products fleet wide. The SDR program is an exchange of information and a method of communication between the FAA and the aviation community concerning inservice problems.

A report is filed whenever a system, component, or part of an aircraft, powerplant, propeller, or appliance fails to function in a normal or usual manner. In addition, if a system, component, or part of an aircraft, powerplant, propeller, or appliance has a flaw or imperfection which impairs, or which may impair its future function, it is considered defective and should be reported under the program.

These reports are known by a variety of names: Service Difficulty Reports (SDR), Malfunction and Defect Reports (M or D) and Maintenance Difficulty Reports (MDR).

The consolidation, collation and analysis of the data, and the rapid dissemination of trends, problems and alert information to the appropriate segments of the aviation community and FAA effectively and economically provides a method to ensure future aviation safety.

The FAA analyzes SDR data for safety implications and reviews the data to identify possible trends that may not be apparent regionally or to individual operators. As a result of this review, the FAA may disseminate safety information to a particular section of the aviation community. The FAA also may adopt new regulations or issue airworthiness directives (AD’s) to address a specific problem.

The primary source of SDR’s are certificate holders operating under Parts 121, 125, 135, 145 of the Federal Aviation Regulations, and the general aviation community which voluntarily submit records. FAA Aviation Safety Inspectors may also report service difficulty information when they conduct routine aircraft and maintenance surveillance as well as accident and incident investigations.

The SDR database contains records dating back to 1974. Reports may be submitted on the Internet through an active data entry form or on hard copy. The electronic data entry form is in the AFS-600 Aviation Information web site under the heading SDR Main Menu. The URL is: <http://av-info.faa.gov>

A public search/query tool is also available on this same web site. This tool has provisions for printing reports or downloading data.

At the current time we are receiving approximately 45,000 records per year.

Point of contact is:
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Service Difficulty Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125

Telephone: (405) 954-6500
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ADDRESS CHANGES

In the past, the Designee Standardization Branch (AFS-640) maintained the mailing list for this publication. Now, the Government Printing Office (GPO) sells this publication and maintains the mailing list; therefore, please send your address change to: U.S. Government Printing Office, **ATTN: SSOM, ALERT-2G**, 710 N. Capital Street N. W., Washington, DC 20402

You may also send your address change to GPO via FAX at: (202) 512-2168. If you FAX your address change, please address it to the attention of: **SSOM, ALERT-2G**. Whether you mail or FAX your address change, please include a copy of your old address label, and write your new address clearly.

IF YOU WANT TO CONTACT US

We welcome your comments, suggestions, and questions. You may use any of the following means of communication to submit reports concerning aviation-related occurrences.

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You can access current and back issues of this publication from the internet at: http://afs600.faa.gov

When the page opens, select “AFS-640” and then “Alerts” from the drop-down menu. The monthly issues of the Alerts are available back to July 1996, with the most recent edition appearing first.

AVIATION SERVICE DIFFICULTY REPORTS

The following are abbreviated reports submitted between July 11, 2002, and August 26, 2002, which have been entered into the FAA Service Difficulty Reporting (SDR) System data base. This is not an all inclusive listing of Service Difficulty Reports. For more information, contact the FAA, Regulatory Support Division, Aviation Data Systems Branch, AFS-620, located in Oklahoma City, Oklahoma. The mailing address is:

FAA
Aviation Data Systems Branch, AFS-620
PO Box 25082
Oklahoma City, OK 73125

These reports contain raw data that has not been edited. If you require further detail please contact AFS-620 at the address above.

FEDERAL AVIATION ADMINISTRATION

Service Difficulty Report Data

Sorted by Aircraft Make and Model then Engine Make and Model. This Report Derives from Unverified Information Submitted By the Aviation Community without FAA review for Accuracy.

ACFT MAKE	ENG MAKE	COMP MAKE	PART NAME	PART CONDITION	DIFF-DATE	T TIME
ACFT MODEL	ENG MODEL	COMP MODEL	PART NUMBER	PART LOCATION	OPER CTRL NO.	TSO
REMARKS						
	GARRTT		TURBINE	GOUGED	07/15/2002	
	TFE731*		30723973	3RD LPC DISK	2002FA0000878	
NEW TURBINE DISK RECEIVED FROM HONEYWELL WITH SCRATCHES/GOUGES ON FORWARD WEB BY CURVED TEETH.						
AMTR			SPRING	BROKEN	06/04/2002	119
CA7			111020	TAIL WHEEL	2002FA0000839	
TAIL SPRING BROKE FORWARD OF TAIL WHEEL ATTACH AREA. PREVIOUS DAMAGE NOTED AT SPRING CRACKED/BROKEN AREA.						
AMTR	LYC		SEAL	FAILED	06/18/2002	
S1C	IO360B4A		70310	ENGINE	2002FA0000810	
PUSH ROD SHROUD SEAL FAILED, CAUSING OIL LEAK.						
AVIAT	LYC		STOP	CRACKED	07/24/2002	4048
A1A	O360C1G		35128001	TE FLAPS	2002FA0000955	
DURING FLAP HANDLE REPLACEMENT, THE FLAP SETTING STOP ASSY WAS REMOVED AND A CRACK WAS FOUND IN THE FULL FLAP NOTCH AND FAILURE OF THE ASSY WAS FORTHCOMING. THIS SAME STOP ASSY HAD BEEN REMOVED 128.7 HOURS EARLIER FOR FLAP SYSTEM INSPECTION AND NO CRACK WAS PRESENT AT THAT TIME. THIS WOULD BE THE SECOND FLAP STOP ASSY FAILURE DUE TO CRACKING FOUND BY THIS SHOP.						
BBAVIA	CONT		SPAR	CRACKED	07/16/2002	
7AC	A658			RT WING	CA020730005	
(CAN) WING SPARS, RIGHT FRONT WING WITH SMALL CRACKS FROM NAIL HOLES VARIOUS LOCATIONS. RIGHT REAR SPAR WITH CRACK FROM TIP DAMAGE PREVIOUS. BOTH SPARS REPLACED.						
BBAVIA	CONT		SPAR	CRACKED	06/30/2002	
7EC	C9012F			WING	CA020722013	
(CAN) ALL 4 SPARS REPLACED DUE TO SMALL CRACKS AT NAIL HOLES, EDGE OF PLYWOOD REINFORCING AS A PRECAUTIONARY MEASURE. NO LARGE CRACKS FOUND.4 NEW METAL SPARS INSTALLED.						
BBAVIA			SPAR CAP	CRACKED	07/18/2002	2593
7ECA			5263	RT WING	2002FA0000831	4
DURING COMPLIANCE WITH AD 00-25-02R1, THE RIGHT WING REAR SPAR WAS FOUND TO HAVE A COMPRESSION CRACK AT THE AILERON CENTER HINGE ATTACH BRACKET, UPPER HOLE. THE CRACK IS VISIBLE ON THE FORWARD AND AFT FACE OF THE SPAR EXTENDING UP FROM THE BOLT HOLE AND ACROSS THE SPAR CAP. THE INSPECTION WAS ACCOMPLISHED USING A FLEXIBLE BORESCOPE AS PER SERVICE BULLETIN 406 INSTRUCTIONS.						
BBAVIA	LYC		SPLICE	LOOSE	03/12/2002	
8GCBC	O360*			RT MLG SKI	2002FA0000774	
RIGHT LANDING GEAR, SKI CABLE CAME LOOSE. AERO SKI R2800 SKIS INSTALLED. CABLE IS SMALLER THAN MOST SKI INSTALLATIONS. THE NICOPRESS SLEEVE ON THE THIMBLE EYE SPLICE ON THE CABLE END SLIPPED OFF THE CABLE. CABLE CAME LOOSE FROM AIRFRAME.						
BBAVIA	LYC		FITTING	BROKEN	03/12/2002	
8GCBC	O360*			HYD SYSTEM	2002FA0000775	
PLASTIC T FITTING IN HYDRAULIC LINE BETWEEN RESERVOIR AND BRAKE CYLINDERS BREAKS OFF. THIS ALLOWS THE BRAKE FLUID TO						

ESCAPE.
BEECH PWA SPAR CRACKED 07/10/2002
100BEECH PT6A28 9763000023 RUDDER CA020719006
(CAN) DURING A PHASE 2 INSPECTION IT WAS NOTED THAT THE RUDDER SPAR WAS CRACKED APPROXIMATELY 1.3 INCH, WHERE THE CENTER HINGE BRACKET ATTACHES. THE CRACK WAS RUNNING VERTICALLY ALONG THE LT NUT PLATE FOR ATTACHING THE HINGE BRACKET. UPON REMOVAL OF THE SPAR IT WAS FOUND THAT THE HINGE DOUBLER P/N 96-630000-307 WAS ALSO CRACKED IN THE SAME PLACE.
BEECH WHEEL DESTROYED 06/27/2002 346
2000 1228100781 MLG 2002FA0000819 71
RIGHT INBOARD WHEEL AND TIRE ASSEMBLY DEPARTED THE AIRCRAFT AFTER TAKEOFF. WHEEL BEARING HAD DISINTEGRATED. INSPECTION REVEALED NR 2 WHEEL BEARINGS SPALLED AND NR 4 WHEEL BEARINGS OVERHEATED. 71 HOURS SINCE INSPECTION AND LUBE. RECOMMEND MORE FREQUENT LUBE INTERVAL OR REDESIGN WITH LARGER BEARING.
BEECH PWA FRAME CRACKED 07/17/2002
200BEECH PT6A41 5042006653 FUSELAGE CA020725013
(CAN) TWO CRACKS STARED FROM THE RADIUS OF THE LOWER FLANGE. THE FORWARD CRACKED ENDED AT LIGHTNING HOLE WHILE THE OTHER CRACK ENDED BEHIND THE AFT LIGHTNING HOLE. IPL 53-10-10-37
BEECH PWA ARM FAILED 04/11/2002
200BEECH PT6A42 5052432634 RUDDER CONTROL AUS20020642
(AUS) CAPTAINS RH RUDDER PEDAL ARM FAILED. INVESTIGATION FOUND THAT THE PIVOT BOLT HOLE WAS WORN AND ELONGATED.
BEECH PWA FUEL TANK COLLAPSED 07/04/2002
200BEECH PT6A42 FUEL STORAGE AUS20020648
(AUS) RH AUXILIARY FUEL CELL COLLAPSED. VELCRO ATTACHMENT PADS HAD BECOME UNGLUED AND SEPARATED FROM THE TOP SURFACE OF THE FUEL CELL. INSPECTION FOUND THAT THE RH FUEL VENT HEATING ELEMENT HAD FAILED, ALLOWING THE VENT TO BECOME BLOCKED WITH ICE CAUSING THE FUEL CELL TO COLLAPSE.
BEECH PWA WINDSHIELD CRACKED 07/22/2002
200BEECH PT6A42 10138402522 FLIGHT AUS20020727
(AUS) RH WINDSHIELD INNER PLY SHATTERED. WINDSHIELD HEAT WAS OFF' AT THE TIME.
BEECH PWA DOWNLOCK FAILED 06/14/2002 594
400A JT15D5 NLG 2002FA0000919
NOSE LANDING GEAR DOWNLOCK LIGHT DID NOT COME ON AFTER DEPLOYMENT OF LANDING GEAR. GEAR CYCLED SEVERAL TIMES AND STILL NO DOWN AND LOCK LIGHT ILLUMINATION. TOWER FLY BY PERFORMED AND CONFIRMED DEPLOYMENT. AIRCRAFT LANDED SAFELY. NEW SWITCH INSTALLED.
BEECH BRACE FAILED 05/22/2002 5131
58 95824019 NLG 2002FA0000863
NOSE RETRACT BRACE FAILED ALLOWING NOSE GEAR TO RETRACT UPON LANDING.
BEECH CONT MAGNETO FAILED 07/02/2002 3
58 IO520* ENGINE 2002FA0000832
ON A GROUND RUN UP, PILOT REPORTED A BAD MAG DROP. AFTER PULLING MAGNETO OFF OF THE ENGINE, IT APPEARS THE MAGNETO FAILED. THE PLASTIC DRIVE GEARS WERE STRIPPED AS WELL AS THE MAGNETO RETAINER DRIVE COUPLING AND DRIVE COUPLING RUBBER BUSHING WERE DAMAGED. NO OTHER DAMAGE WAS FOUND ON THE ENGINE.
BEECH CONT THROTTLE BROKEN 06/18/2002
58 IO520C 5038901229 ENGINE CA020726008
(CAN) APPROXIMATELY 6 INCHES FROM ENGINE END THROTTLE CABLE BROKE. REPLACED THROTTLE CABLE.
BEECH CONT BRACKET CRACKED 07/19/2002 94
58 IO550C 585550111 A/C COMPRESSOR 2002FA0000920
DURING 100 HOUR INSPECTION FO THE LT ENGINE, THE UPPER ARM OF THE AIR CONDITION COMPRESSOR BRACKET WAS FOUND TO BE CRACKED. IT APPEARS AS IF IT WAS NOT SHIMMED CORRECTLY. DURING INITIAL INSTALLATION WHICH PRELOADED THE ARM AND CRACKED. C/A: PROPERLY SHIM BRACKET TO PREVENT PRELOAD.
BEECH BATTERY CONTAMINATED 06/27/2002
76 ELT 2002FA0000956
UNDER ANNUAL INSPECTION DURING BATTERY OPS CHECK, NO READING. FURTHER INSPECTION OF BATTERY PACK REVEALED WATER INSIDE BATTERY AND ELT COMPARTMENTS. THERE WAS NO EVIDENCE OF WATER IN ELT ATTACHING TRAY.
BEECH PWA BEECH CAP CRACKED 06/27/2002
99 PT6A28 993880001 4377113 NLG ACTUATOR CA020628002
(CAN) PILOT SELECTED GEAR DOWN. GEAR CAME DOWN AND 3 GREEN WERE INDICATED. MOTOR KEEP RUNNING UNTIL C/B POPPED. AIRCRAFT LANDED WITHOUT INCIDENT. NOSE GEAR ACTUATOR REPLACED, GEAR SWINGS CARRIED OUT AND AIRCRAFT RELEASED TO SERVICE. END CAP FRACTURED.
BEECH PWA FLOORBOARD CRACKED 06/17/2002 15696
A100 PT6A28 50440012655 CABIN CA020624003
(CAN) THE ENTRANCE FLOOR PANEL WAS FOUND CRACKED AT STATION 278.5. PANEL REPLACED AND NO FURTHER DAMAGE REPORTED
BEECH CONT SPRING BROKEN 07/14/2002 1958
A36 IO520BB IMPULSE COUPLIN 2002FA0000865
PILOT REPORTED SMOOTH 200 RPM DROP ON LT MAGNETO DURING RUN UP. TROUBLESHOOTING FOUND LT MAGNETO TIMING 7 DEGREES RETARDED. MAGNETO WAS REMOVED AND IMPULSE COUPLING FOUND TO HAVE A BROKEN SPRING. COUPLING WAS REPLACED WITH A NEW UNIT.
BEECH CONT SEAL CORRODED 07/02/2002 1049
A36 IO550* 1540320 NLG BEARING 2002FA0000883
RT NOSE WHEEL BEARING, CORRODED. BEARING SEAL NOT INSTALLED ON BEARING SECURELY. THE SEAL RESTS AGAINST THE BEARING. WATER EASILY GETS INTO BEARING. BEARING CORRODES AND SPINS ON AXLE. HAD TO REPLACE AXLE. REPAIR STATION SAID THE MANUFACTURED THE SEAL TO MFG. INSTRUCTIONS AND IF THERE IS A PROBLEM IT IS A MFG PROBLEM.
BEECH GARRTT CHECK VALVE OPEN 07/02/2002
B100 TPE331625 36600 FUEL SYSTEM CA020724002
(CAN) FOLLOWING A FLIGHT WHILE UTILIZING THE AUXILIARY RESOURCES, A CHECK VALVE STAYED PARTIALLY OPEN. THE MAIN RESERVOIR TRANSFERRED TO THE AUXILIARY AND THE FUEL (TOO FULL) EXITED BY THE VENT AND LEAKED TO THE GROUND. THE PILOT ACTIVATED THE BOOST PUMP WITH AUXILIARY TRANSFER AND THE PROBLEM WAS RESOLVED.
BEECH PWA STUD FRACTURED 07/09/2002
B200C PT6A42 AN2278B CONTROL COLUMN AUS20020670
(AUS) AILERON CONTROL SYSTEM STUD FRACTURED. CLAMP PNO AN737TW56-66 LOOSE AT BOTTOM OF CONTROL COLUMN ALLOWING THE CONTROL COLUMN BOOT PNO 101-54149-37 TO MOVE UNSECURED AROUND THE CONTROL COLUMN. LH AILERON CONTROL CABLE TURNBUCKLE LOCKWIRE CAUGHT ON BRACKET PNO 50-524466-7 WHEN THE CONTROL WHEEL WAS MOVED TO THE RIGHT.

BEECH PWA BOLT CRACKED 06/20/2002
B200T PT6A42 817841232 FUSELAGE, WING A AUS20020710
(AUS) UPPER FORWARD WING ATTACHMENT BOLT SUSPECT CRACKED. FOUND DURING FLUORESCENT INSPECTION IAW AD/B200/38 A4 AND BEECH S.I.R.M.

BEECH LYC LYC SCREW MISSING 03/20/2002
C23 O360A4K O360A4K MS35206218 ENGINE AIR INTAK AUS20020717
(AUS) CARBURETOR HEAT INOPERATIVE DUE TO MISSING SCREWS (3OFF) AND NUTS ALLOWING THE BUTTERFLY VALVE TO ROTATE FREELY ON THE SHAFT PNO 169-910049-47.

BEECH PWA SOLENOID FAILED 06/13/2002
C90A PT6A21 CABIN PRESSURE CA020618005
(CAN) A/C FAILED TO PRESSURIZE AFTER TAKEOFF. UPON RETURN TO BASE THE A/C STILL WOULD NOT PRESSURIZE ON "TEST" POSITION. MAINTENANCE DETERMINED THAT THE CABIN PRESSURE SAFETY VALVE SOLENOID (DESIGNATOR E 105) WAS FAILED OPEN, NOT ALLOWING THE SAFETY VALVE TO CLOSE AFTER TAKEOFF. THE SOLENOID VALVE WAS REPLACED AND THE A/C WAS TEST FLOWN WITH PRESSURIZATION SERVICEABLE.

BEECH PWA GUSSET CRACKED 05/26/2002 13460
D18S R985AN14B 804184200651 MLG CA020607002
(CAN) DURING INITIAL INSPECTION OF AIRCRAFT AD CF-63-08 INSPECTED AND LT INBOARD AND RT INBOARD LANDING GEAR CLUSTER VISUALLY CRACKED. BOTH CLUSTERS HAD BEEN CRACKED AND WERE WELDED SHUT. CRACKS WERE THRU WELD AND PROGRESSING ALONG GUSSETS AND THRU GUSSETS.

BEECH CONT FLOW DIVIDER FLUCTUATES 06/11/2002 318
F33A IO520B 6314272A20 ENGINE 2002FA0000771
FUEL FLOW FLUCTUATES IN-FLIGHT AND THE ENGINE WAS ROUGH RUNNING AT ALTITUDE, AT LOW ALTITUDE THE ENGINE WAS SMOOTH IN OPERATION. OPERATION CHECK OF ENGINE ON THE GROUND FOUND THE FUEL FLOW DIVIDER WOULD FLUCTUATE. REMOVED FLOW DIVIDER AND INSTALLED A NEW OVERHAULED ASSEMBLY. GROUND OPERATION OF ENGINE CHECKED NORMAL.

BEECH CONT MOTOR NOISY 06/11/2002
F33A IO520BB 583800901 LANDING GEAR 2002FA0000769
GEAR MOTOR MAKES GRINDING NOISE WHEN THE GEAR IS RETRACTED. MOTOR WAS REMOVED AND A NEW MOTOR INSTALLED OPERATION OF THE GEAR SYSTEM IAW MM, CHECKED NORMAL.

BEECH CONT RELAY STICKS 06/11/2002 162
F33A IO520BB SM50D7 LANDING GEAR 2002FA0000770
LANDING GEAR WOULD NOT RETRACT AFTER TAKE OFF. AIRCRAFT WAS PLACED ON JACKS AND THE LANDING GEAR CYCLED IAW MM. INSPECTION OF THE SYSTEM FOUND THAT THE DYNAMIC RELAY WOULD STICK IN THE DOWN POSITION. A NEW DYNAMIC RELAY WAS INSTALLED AND THE SYSTEM OPERATIONAL CHECKED NORMAL.

BEECH CONT PUMP FAILED 06/10/2002 213
F33A IO520BB RA216CW VACUUM SYS 2002FA0000772
UNABLE TO MAKE INSTRUMENT AIR PRESSURE AT LOW RPM, INSPECTED SYSTEM AND FOUND THAT THE PUMP WAS MAKING SMALL CHUNKS OF CARBON FOUNDED IN THE REGULATOR AND INLET FILTER. PURGED SYSTEM AND CLEANED LINES IN SYSTEM. NEW INLET AND INLINE FILTER INSTALLED. NEW PUMP INSTALLED, SYSTEM GROUND CHECKED, CHECKED NORMAL.

BELL ALLSN NUT UNSECURE 06/14/2002 4431
206L3 250C30 MS21042L4 T/R DRIVESHAFT 2002FA0000871
PILOT COMPLAINED OF MEDIUM FREQUENCY VIBRATION. VIBRATION WAS ISOLATED TO THE TAIL ROTOR DRIVE SHAFT 5TH SEGMENT. THEMS21042L4 NUT THAT SECURES THE HANGER BEARING ON THE SHAFT HAD LOST TORQUE. THIS ALLOWED THE BEARING INNER RACE TO SPIN ON THE SHAFT, RUINING THE SHAFT. THE NUT HAD 5 INCH LBS. OF TORQUE. THERE HAD BEEN NO PREVIOUS MAINTENANCE IN THIS AREA EXCEPT INSPECTIONS. THE SHAFT, ADAPTER, AND THE HANGER BEARING HAD TO BE REPLACED.

BELL ALLSN GEARBOX MISMANUFACTURE 07/01/2002
407 250C47B 23064640 ENGINE 2002FA0000844
UPON INSPECTION BEFORE GEARBOX ASSEMBLY. SCAVENGE TUBE CUT OUT NOT WIDE ENOUGH, CAUSING TUBE TO RUB. 2 EACH STUDS NOT FULLY SEATED AT N1 PICKUP AREA. OIL PUMP INSERTS NOT CLEANED OUT. ASSURE PROPER MANUFACTURING AND INSPECTED BY QA BEFORE LEAVING FACTORY.

BELL LYC BELL STUD FAILED 04/21/2002
47G3B TVO435B1A 476618011 ROTORCRAFT AUS20020628
(AUS) COOLING FAN MOUNT STUD LOCATED ON CRANKCASE FAILED. LOSS OF TENSION ALLOWED BELT TO FALL OFF AND DESTROY THE COOLING FAN.

BOLKMS LYC CARGO HOOK BROKEN 06/13/2002
BK117B2 LTS101750B1 52801702 CARGO BAY AUS20020635
(AUS) CARGO HOOK KEEPER ASSEMBLY ARM (1OFF) BROKEN AND THE OTHER ARM BENT. THE LOAD BEAM WAS ALSO BENT. THE LOAD WAS UNINTENTIONALLY RELEASED.

CESSNA CONT BLADE CORRODED 07/17/2002
140 C8512 PROPELLER CA020729003
(CAN) PROPELLER RECEIVED FOR CORROSION INSPECTION. EXTRA WORK REQUIRED TO REMOVE CORROSION CARRIED OUT: AN OVERHAUL. AS PER MCCAULEY MANUAL 730720

CESSNA LYC STOP MISSING 06/24/2002
150J O320E2D NAS428H37 RUDDER CA020731014
(CAN) UPON COMPLETING INSPECTION OF RUDDER STOPS PER AD CF-2000-20, IT WAS FOUND THAT THE RUDDER STOPS WERE BOTH MISSING. THERE WERE NO HOLES IN THE TAIL CONE SKIN WHERE THE STOPS SHOULD HAVE BEEN, BUT THE ANCHOR NUTS WERE RIVETS TO THE BULKHEAD. THIS SKIN WAS REPLACED (ACCORDING TO A WORK REPORT FOUND IN THE LOGBOOK) IN 1978 WHILE THE AIRCRAFT WAS IN MAJOR REPAIRED. OBVIOUSLY, THIS AIRCRAFT WAS FLOWN WITHOUT RUDDER STOPS FOR SOME 24 YEARS AND 1365 HOURS.

CESSNA CONT WHEEL CRACKED 07/16/2002
150L O200A C30057 MLG CA020729011
(CAN) UPON INSPECTION IT WAS DISCOVERED THAT THE HUB WAS CRACKED IN THE AREA OF THE GREASE SEAL RETAINING RING. THE CRACK IS ONLY ABOUT 3/8 INCH LONG AND TRAVELS PARALLEL TO THE RETAINING RING GROOVE JUST BELOW IT. HUB WAS REPLACED.

CESSNA CONT BULKHEAD CRACKED 07/23/2002 2730
150M O200* 04120081 TAILCONE 2002FA0000884
CRACKS THROUGH BULKHEAD. TIE DOWN PROBLEMS/ LANDINGS TAIL LOW. REPETITIVE TAIL LOW LANDINGS.

CESSNA CONT CESSNA PIN MISSING 08/11/2002
150M O200A SPUR GEAR CA020812005
(CAN) TWO PERMANENT PINS THAT HOLD THE SPUR GEAR TO THE ROTATING SHAFT OF THE TRIM TAB ACTUATOR HAD FALLEN OUT AND WENT MISSING. TRIM CONTROL WAS IMPOSSIBLE DUE TO SLIPPAGE OF THE SPUR GEAR IN THE SHAFT. ACTUATOR REPLACED WITH NEWLY OVERHAULED UNIT.

CESSNA LYC CESSNA BUTTERFLY SEPARATED 07/03/2002
152 O235C2C 04500522 04500704 CARBURETOR CA020726019
(CAN) THE SEAL FOR THE BUTTERFLY VALVE IN THE CARBURETOR AIR BOX (FOR CARBURETOR HEAT) SEPARATED AND WAS SUCKED UP INTO THE CARBURETOR. THIS CAUSED THE ENGINE TO LOSE PERFORMANCE WHICH MADE THE PILOT RETURN FOR A LANDING. TOWER REPORTED SMOKE (LIKELY FROM A RICH MIXTURE) TAILING THE AIRCRAFT. UNEVENTFUL LANDING. AIRCRAFT REMOVED FROM SERVICE. NOW REPAIRED AND BACK ON LINE.
CESSNA LYC FITTING BROKEN 06/24/2002
152 O235L2C 04311481 VERTICAL STAB CA020718009 10919
(CAN) ON PRE-FLIGHT INSPECTION THE PILOT NOTICED A CRACK ON THE LEFT VERTICAL FIN ATTACH BRACKET. WHEN MAINTENANCE REMOVED THE BRACKET IT WAS FOUND BROKEN THROUGH. THE BRACKET WAS REPLACED WITH NEW AND NEW HARDWARE USED. THE RIGHT BRACKET WAS REMOVED CLEANED AND INSPECTED NO FAULT FOUND REINSTALLED USING NEW HARDWARE. THE REMAINING AIRCRAFT IN THE FLEET WERE INSPECTED WITH NO FAULTS FOUND.
CESSNA LYC CESSNA FORK CRACKED 07/23/2002
152 O235L2C 044250413 04425037 STRUT CA020724010
(CAN) WITH THE PAINT CLEANED AWAY FROM THE UPPER OUTSIDE RADIUS OF THE FORK, THE TECHNICIAN WAS ABLE TO DETECT THE CRACK WITH A GOOD LIGHT AND 10 X MAGNIFIER. THE CRACK RUNS HORIZONTALLY AND IS ABOUT 1-2 INCHES LONG. THE DEFECTIVE PART HAS BEEN REMOVED FROM SERVICE AND REPLACED WITH A FACTORY NEW PART.
CESSNA WHEEL CRACKED 07/31/2002 2725
172M D30256 MLG 11510 100
ON INSPECTION OF CENTER HUBS OF THE TWO MAIN WHEELS FOUND ONE HUB TO HAVE 12 CRACKS ONE AT EA. BOLT HOLE. THE OTHER HUB HAD SIMILAR CRACKING. THESE WHEELS WERE INSPECTED 100 HRS PRIOR WHEN NEW TIRES WERE INSTALLED AND ON CRACKS WERE NOTED. THESE WHEELS/TIRES WERE REMOVED FOR INSPECTION DUE TO THE FACT WE HAVE FOUND 6 OF THE SAME WHEELS (HUBS)CRACKED ON 172/182/210 CESSNA AIRCRAFT IN THE LAST WEEK.
CESSNA LYC EXHAUST BROKEN 08/01/2002
172N O320D2G AEL19001 ENGINE CA020808006
(CAN) AT CRUISING ALTITUDE, THE MOTOR LOST POWER. THE RPMS DROPPED TO 2000 RPM AT THE RICHELIEU AIRPORT. INSPECTION OF NR 3 CYLINDER , THE MOTOR FOUND NO COMPRESSION, AFTER IN-DEPTH EXAMINATION, THE EXHAUST VALVE WAS FOUND TO BE BROKEN, REPLACED THE CYLINDER.
CESSNA LYC SKIN CRACKED 06/26/2002 11000
172N O320H2AD AK172168 FUSELAGE CA020722015
(CAN) WHEN STEPPING ONTO FUSELAGE STEP, THE STEP HAD MORE 'GIVE' THAN NORMAL. WHEN STEP WAS UNBOLTED, CRACKS WERE SEEN IN THE FUSELAGE SKIN. ALL COMPANY 172S & 172RGS WERE CHECKED AND ALL HAD CRACKS DEVELOPING TO SOME DEGREE. IT SEEMS THAT THE INSTALLATION ISN'T STRONG ENOUGH AND AN EXTRA DOUBLER OUGHT TO BE INSTALLED UNDER THE MOUNTING NUTS.
CESSNA SEAT CRACKED 06/12/2002 779
172R 051422713 COPILOT 2002FA0000784
1.5 INCH CRACKS ON COPILOTS SEAT CUSHION BASE. REPLACED WITH NEW PART WHICH IS TWICE AS THICK.
CESSNA RESERVOIR RUPTURED 07/29/2002 313
172R 051600918 FUEL SYSTEM 0207008 313
UPON ROUTINE INSPECTION, IT WAS NOTED THAT A FUEL STAIN WAS EVIDENT ON THE UNDERBELLY OF THE AIRCRAFT IN THE VACINITY OF THE FUEL SELEVTOR VALVE. CABIN FLOORING AND UPHOLSTERY WAS REMOVED AND THE FUEL SELECTOR AND FUEL RESERVOIR PN 0516009-18 WAS REMOVED & INSPECTED. THE RESERVOIR WAS PURGED AND PRESSURE TESTED. THE TANK WAS THEN COVERED IN A SOAPY WATER SOLUTION AND A LEAK WAS NOTED COMING FROM A WELDED SEAM. IT IS BELIEVED THAT A MINIMUM .75 INCH CRACK WAS EVIDENT IN A PART WITH ONLY 300 HOURS.
CESSNA LYC AIR FILTER MISINSTALLED 06/04/2002
172RG O360* C2945100501 INDUCTION SYS 2002FA0000870
INSPECTED AIRCRAFT FOLLOWING PURCHASE FOR FLIGHT SCHOOL. DISCOVERED INDUCTION AIR FILTER INSTALLED BACKWARDS. HOUSING IS EVEN LABELED FOR AIRFLOW WITH AN ARROW. HOUSING WAS IN BACKWARDS ALSO. WITH ARROW POINTING FORWARD AWAY FROM THE CARB TOWARDS THE INSIDE.
CESSNA SWITCH FAILED 07/08/2002 1652
172S S337711 INTRUMENT 2002FA0000824
DURING MAINTENANCE PRE-RUN FOR PHASE INSPECTION, WHEN MASTER AVIONICS SWITCH WAS TURNED OFF, ONLY HALF OR THE AVIONICS COMPONENTS TURNED OFF. ONE SIDE OF THE SWITCH FAILED IN THE ON POSITION. REPLACED SWITCH, OPERATIONAL CHECKED SAT.
CESSNA CIRCUIT FAILED 06/28/2002
172S S13605L NAV LIGHTS 0628022541
THE RIGHT WING NAV LIGHT POSITIVE AND NEGATIVE WIRES BURNED TOGETHER, SHORTING THE NAV CIRCUIT. THE 5 AMP NAV LIGHT CIRCUIT BREAKER NEVER TRIPPED. AN INVESTIGATION WAS INITIATED WHEN A PILOT REPORTED THAT THE NAV LIGHT SWITCH WOULD NOT STAY IN THE "ON" POSITION.
CESSNA ELBOW CRACKED 06/28/2002 838
172S S25031 GYRO 2002FA0000820
FOUND PLASTIC ELBOW AT DIRECTIONAL GYRO CRACKED CAUSING INSTRUMENT TO PRECESS.
CESSNA BULKHEAD CRACKED 06/20/2002 35
172S 055032111 PROP SPINNER 2002FA0000894
DURING A PRE-FLIGHT INSPECTION THE PILOT NOTED THAT THE SPINNER BULKHEAD WAS CRACKED.
CESSNA LYC GEAR CRACKED 05/15/2002 1286
172S IO360A1A M3827 MAGNETO 2002FA0000857
MAGNETO ROTOR GEAR FOUND CRACKED ON INSPECTION.
CESSNA LYC SERVO FAILED 07/16/2002
172S IO360L2A RSA5AD1 FUEL CONTROL CA020729008
(CAN) PILOT REPORTED THAT THE ENGINE QUIT WHEN LANDING AND THROTTLE PULLED TO FULL IDLE. GROUND RUN CONFIRMED PROBLEM. MIXTURE CONTROL ADJUSTED TO GET PROPER RISE AT IDLE CUT-OFF - RUN UP AND FULL IDLE OPERATION NOW NORMAL.
CESSNA DOOR SEPARATED 07/05/2002 3126
177RG ALTERNATE AIR 2002FA0000852
ALTERNATE AIR DOOR CAME LOOSE FROM PLENUM CHAMBER. DOOR WENT INTO FUEL SERVO INLET, CAUSING ENGINE TO QUIT.
CESSNA CONT GEAR WRONG PART 04/16/2002
180J O470S CAMSHAFT CA020606003
(CAN) ENGINE WAS PUT TOGETHER WITH THE WRONG CAMSHAFT GEAR. THE ENGINE WOULD RUN BUT THE MAGNETO DROP WAS HIGH. ALSO IF YOU EXERCISED THE PROP AT ABOUT 1700 RPM THE ENGINE WOULD STALL OUT. THROTTLE RESPONSE AT LOWER RPMS WAS SLUGGISH AND WOULD MAKE THE ENGINE SPIT AND SPUTTER. HIGHER RPMS SEEMED NO PROBLEM.
CESSNA SKIN CORRODED 06/05/2002
182P TE FLAPS AUS20020698
(AUS) FLAP SKINS CONTAINED EXTENSIVE SURFACE CORROSION.

CESSNA WHEEL CRACKED 07/31/2002 3198
182P D30259 MLG 11509 154
ON REPLACING A WARN OUT TIRE WE FOUND THE CENTER HUB TO HAVE A CRACK AT 9 OF THE FLANGE MOUNTING BOLT HOLES, WE INSPECTED THE OTHER WHEEL/HUB FOUND IT TO HAVE 4 CRACKS. REPLACED BOTH WHEELS WITH CLEVELAND TWO PIECE WHEELS. WE HAVE FOUND 6 OF THE SAME WHEELS (HUBS)CRACKED ON 172/182/210 CESSNA AIRCRAFT IN THE LAST WEEK.

CESSNA CONT SLICK IMPULSE FAILED 05/28/2002 1749
182Q O470U 6310 MAGNETO 2002FA0000889
LEFT MAGNETO IMPULSE COUPLING FAILED IN FLIGHT. COUPLING PAWS BROKEN FROM BODY AND CAUSED MAGNETO CASE TO BREAK AT MOUNT PAD. MAGNETO MADE METAL INTO ENGINE BEFORE FAILING. WHEN AIRCRAFT PICKED UP AT HANGAR, NO OIL REGISTERED ON DIP STICK.

CESSNA LYC RETAINER MISSING 07/19/2002 641
182S IO540AB1A5 NR 5 CYLINDER 2002FA0000912
NR 3 CYLINDER PUSH ROD BENT, REMOVED THE NR 5 CYLINDER VALVE COVER FOR FURTHER INSPECTION AND FOUND PUSH ROD RETAINING CLIP MISSING AND ASSOCIATED HARDWARE. NO DAMAGE OR PARTS FOUND

CESSNA HINGE CRACKED 05/16/2002
190 03225709 AILERON 2002FA0000800
THESE BRACKETS ARE MADE OF MAGNESIUM AND ARE CORRODING AND CRACKING TO AN ALARMING DEGREE.

CESSNA PWA FUEL CONTROL FAILED 04/27/2002
208 PT6A114A 32448094 THRUST BEARING 2002FA0000881
PILOT REPORTED LOSS OF ENGINE CONTROL. INVESTIGATION REVEALED A THRUST BEARING (PN 2523973) FAILURE INSIDE THE FUEL CONTROL.

CESSNA PWA NUT CRACKED 07/23/2002 1022
208B PT6* MS1782612 WING ATTACH 2002FA0000899
FOUND RIGHT LOWER WING STRUT ATTACH HARDWARE LIGHTLY CORRODED. FURTHER INSPECTION FOUND THAT NUT WAS COMPLETELY CRACKED THROUGH. NEW NUT AND BOLT INSTALLED. PART MAY HAVE BEEN OVERTORQUED UPON INSTALLATION.

CESSNA CONT SPINNER DEPARTED 06/04/2002
210L IO550* 12504192 PROPELLER 2002FA0000842
SPINNER DEPARTED AIRCRAFT WHILE IN FLIGHT. PARTS OF SPINNER AND HARDWARE STILL ATTACHED TO

CESSNA CONT LANDING GEAR MISRIGGED 07/25/2002
310R IO520M MAINS AUS20020742
(AUS) LANDING GEAR INCORRECTLY RIGGED. LANDING GEAR COMPONENTS DAMAGED DUE TO THE EXTENT THAT THE LANDING GEAR WAS OUT OF RIG. THE DEFECTS INCLUDE BENT RETRACT RODS, DENTED AND BENT UNDERCARRIAGE DRIVE TUBES, CORROSION AND RUST ON DRIVE TUBES, SEIZED AND RUSTED HARDWARE, PHYSICAL CONTACT DAMAGE TO UPPER DRAG LINKS FROM UPLOCK HOOK ASSEMBLY. PERSONNEL/ MAINTENANCE ERROR. POOR MAINTENANCE.

CESSNA CIRCUIT FAILED 06/06/2002 75
337D S13602AL COWL FLAP SYS 2002FA0000795
CIRCUIT BREAKER FAILED INTERNALLY WITHOUT TRIPPING. CAUSED OPEN CIRCUIT TO COWL FLAP MOTORS. FAILURE OCCURRED DURING GROUND MAINTENANCE. NEED TO IMPROVE QUALITY CONTROL IN PRODUCTION.

CESSNA CONT GEARBOX WORN 05/21/2002
340CESSNA TSIO520K LANDING GEAR AUS20020644
(AUS) LANDING GEAR ACTUATOR REDUCTION GEARBOX GEAR TEETH WORN. ELECTRIC DRIVE MOTOR INTERMITTENT IN OPERATION AND CLUTCH INEFFECTIVE.

CESSNA IGNITER OVERHEATED 03/18/2002
402B CA14071 HEATER 2002FA0000958
NITE IMC HAD SUDDEN ELECTRICAL SMELL AND SMOKE IN COCKPIT. PILOT SHUT DOWN TOTAL ELECTRICAL SYSTEM SMELL AND SMOKE CLEARED. WHILE TROUBLESHOOTING FOUND IGNITION UNIT ON HEATER HAD OVERHEATED AND STARTED TO MELT DOWN CHANGED UNIT SYSTEM OPS CHECKED GOOD.

CESSNA CONT CONT CABLE FAILED 07/10/2002
402C TSIO520VB TSIO520VB 99104351 POWER LEVER AUS20020757
(AUS) ENGINE CONTROL CABLE INNER CABLE FAILED AT SWAGED ATTACHMENT TO THE COCKPIT END FITTING.

CESSNA CONT CYLINDER CRACKED 07/01/2002
402C TSIO520VB TSIO520VB ENGINE 2002FA0000887
CRACK BETWEEN SPARK PLUG HOLE AND INJECTOR HOLE.

CESSNA CONT ANGLE SEPARATED 07/12/2002
402C TSIO520VB 512400097 AILERON 2002FA0000897
COULD NOT MOVE AILERONS. 90 PERCENT ANGLE, USED TO PREVENT OIL CANNING, BONDED INSIDE AILERON, BROKE LOOSE AND WORKED ITS WAY DOWN TRAILING EDGE OF AILERON AND INTO FLAP TRAILING EDGE, PREVENTING AILERONS FROM MOVING. 90 PERCENT ANGLE IS8 INCHES LONG AND .3750 WIDE, .016 THICK. AILERON WAS REPLACED.

CESSNA CONT MOUNT DEFORMED 06/12/2002
414 TSIO520N J951358 ENGINE CA020719009
(CAN) ENGINE MOUNTS FOUND DEFORMED AND SOFT ALLOWING FOR EXCESSIVE MOVEMENT OF ENGINE ON MOUNTS.

CESSNA CONT ACTUATOR CONTAMINATED 07/13/2002
414A TSIO520* 99101397 NLG 2002FA0000859
UPON LANDING ROLLOUT NOSE GEAR COLLAPSED. INVESTIGATION INDICATED ACTUATOR CONTAMINATED BY WATER. CHEVRON SEALS WORN, AND DOWN LOCK SWITCH DETERIORATED. SUSPECT ACTUATOR FROZE IN FLIGHT FROM COLD TEMPERATURES. ACTUATOR OVERHAULED. NO FURTHER PROBLEM.

CESSNA RIB CRACKED 08/05/2002 7255
441 57222061 LT CENTER WING L2240
DURING A SCHEDULED INSPECTION, IT WAS NOTED THAT THE LEFT WING CENTER SECTION CANTED RIB CAP P/N: 5722206-1 (LCWS 26.85 INCH) HAD A CRACK ALONG THE BEND RADIUS AFT OF THE CENTER WING MAIN SPAR (FS 177.45 INCH) AND EXTENDING APPROXIMATELY 1INCH AFT OF THE SPAR. AFTER REMOVAL FO THE RIB CAP, CLOSE EXAMINATION OF THE PART REVEALED THAT THE CAP WAS MANUFACTURED WITH THE BEND RADIUS PARALLEL TO THE GRAIN OF THE METAL RESULTING IN A GRAIN SEPARATION TYPE CRACK.

CESSNA LINE CHAFED 06/14/2002 308
550 6511711023 SPEED BRAKE 2002FA0000855
FRESH AIR DUCT IN TAILCONE FOUND CHAFING AGAINST SPEED BRAKE CONTROL LINES.

CESSNA PWA DOOR FRAME WORN 07/11/2002
550 JT15D4 55112402 FUSELAGE CA020711002
(CAN) OUTBOARD DOOR SKIN HAS WORN THE DOOR FRAME LINTEL AT THE RADIUS INTO THE DOOR OPENING AS MUCH AS 50 PERCENT MATERIAL THICKNESS.

CESSNA	CONT	GEAR	BROKEN	06/11/2002	
A185F	IO520D	653631	CRANKSHAFT	CA020619012	

(CAN) AT THE MOMENT OF ACCIDENT, THE MOTOR DID A "KICK BACK". TWO TEETH OF THE CRANKSHAFT GEAR THAT WERE IN CONTACT WITH THE STARTER CLUTCH SHAFT GEAR BECAME BROKEN AND FELL INTO THE OIL PAN. THIS MODEL OF THE STARTER CLUTCH CAN STICK IF IT IS TURNED COUNTER-CLOCKWISE OF THE HELIX THAT PUTS HEAVY PRESSURE ON THE TEETH OF THE CRANKSHAFT GEAR.

CESSNA		WHEEL	CRACKED	07/31/2002	1899
T210L		D30259	MLG	11482	140

ON PRECAUTIONARY INSPECTION FOUND CRACKS AT WHEEL/HUB FLANGE MOUNTING BOLT HOLES ON BOTH WHEELS. REPLACED BOTH WHEELS WITH CLEVELAND TWO PIECE WHEELS. WE HAVE FOUND 6 OF THE SAME WHEEL(HUBS)CRACKED ON 172/182/210 CESSNA AIRCRAFT IN THE LAST WEEK. RECOMMEND IMMEDIATE INSPECTION AND OR REMOVAL OF THESE WHEELS FROM SERVICE.

CESSNA	CONT	BRACKET	BROKEN	06/06/2002	
T210N	IO550*	12326241	HORIZ STAB	2002FA0000790	

AIRCRAFT UNDERGOING ANNUAL INSPECTION. HORIZONTAL STABILIZER FOUND LOOSE. INSPECTED AND FOUND REAR MOUNTING REINFORCEMENT BRACKET BOTH SIDES BROKEN AND THE FORWARD ATTACHMENT FITTINGS LOOSE. INSTALLED REAR BRACKETS AND PN SK210-126.

CESSNA	CONT	WINDOW	DEPARTED	06/14/2002	
T310R	TSIO520*	08911077	EMERGENCY EXIT	2002FA0000840	

EMERGENCY WINDOW EXIT DEPARTED AIRCRAFT IN FLIGHT, IN RAIN SHOWER. ALL CABLE PINS BENT. VERY DIFFICULT TO SEE WITH INTERIOR INSTALLED.

CESSNA	CONT	SWIVEL	FAILED	07/02/2002	150
T337G	TSIO520NB	S29991	MIXTURE CABLE	2002FA0000822	

THIS ITEM IS INSTALLED ON A CESSNA T337G THAT HAS HAD TCM TSIO-520 ENGINES INSTALLED AS AN STC MODIFICATION. THE PART IS A BALL-TYPE SWIVEL THAT CONNECTS THE MIXTURE CABLE TO THE MIXTURE CONTROL ARM. THE BALL HAS PULLED OUT OF ITS SWAGED HOUSING. THIS IS THE THIRD SUCH FAILURE IN 177 HOURS.

CESSNA	CONT	CONT	PUMP	CRACKED	06/14/2002	
U206F	IO520F	IO520F	632856	RECIPROCATING	AUS20020631	

(AUS) ENGINE OIL PUMP HOUSING CRACKED. CRACK APPEARS TO ORIGINATE FROM A CASTING MARK. FOUND WHEN OIL FILTER ADAPTER WAS REMOVED FOR RECTIFICATION OF AN OIL LEAK.

DHAV	PWA	BEARING	DISINTEGRATED	07/15/2002	
DHC2MK3	PT6A27	KS4	ELEVATOR	CA020717001	

(CAN) UPON INSPECTION FOUND THAT THE CENTER BEARING ON THE RT ELEVATOR WAS MISSING.

DIAMON	CONT	HINGE	CRACKED	07/16/2002	
DA20C1	IO240B	2055450300	VERTICAL STAB	CA020729004	

(CAN) CRACK FOUND ON BOTTOM LEFT WELD OF SUPPORT BRACKET.

GROB	LYC	BRACKET	CRACKED	06/11/2002	194
G120A	AEIO540D4D5	115TA600009	ALTERNATOR	2002FA0000768	

ALTERNATOR BRACKET CRACKED, THIS BRACKET IS USED TO ADJUST THE BELT TENSION. REMOVED BRACKET AND INSTALLED NEW BRACKET. ADJUSTED BELT TENSION IAW MM.

GULSTM	LYC	CLEVIS	FRACTURED	06/28/2002	
500B	IO540E1B5	ED12758	LANDING GEAR	AUS20020643	3244

(AUS) MAIN LANDING GEAR HYDRAULIC RAM ROD END CLEVIS FRACTURED.

HOACAU	ROTAX	PLUG	LOOSE	06/25/2002	
HK36R	ROTAX912		CRANKSHAFT	CA020703001	

(CAN) CRANKSHAFT HAS PRESSED IN WELSH PLUG IN FORWARD SECTION. THIS PLUG WAS FOUND INSIDE CRANKCASE. THE FOD WAS LIMITED TO CYLINDERS AND UNDERSIDE OF PISTONS.

LUSCOM	CONT	TANK	LEAKING	06/01/2002	
8A	A65*		LT WING	2002FA0000794	

WING TANKS INSTALLED IN THIS AIRCRAFT DURING 200-2001 WING RECOVER. TANKS REMOVED FOR REPAIR AFTER COMPLAINT ABOUT LEAKAGE. RIGHT TANK HAD LEAKED AT WELD SEAM AND WAS PREVIOUSLY REPAIRED BY OWNER. LEFT TANK HAD A LEAK AT THE ROOT OF TANKING THE WELD BEAD WHERE FLANGES WERE JOINED BY WELDING THE BASE METALS TOGETHER AT A PARALLEL LAP JOINT (NO FILLER). THIS JOINT APPEARS TO BE SMOOTH AND WELL FORMED. NOTED DAMAGE IN THE FORM OF SOME TOOL MARKS, PART DEFORMITIES, BENDING AND BULGES WHICH WOULD INCREASE STRESS TO THE WELD JOINTS IN SERVICE.

MOONEY	LYC	LINE	CORRODED	06/25/2002	
M20E	IO360A1A		FUEL DIST	CA020724005	

(CAN) - DURING ANNUAL INSPECTION, FOUND FUEL ODOR IN CABIN AND FUEL STAIN ON LOWER FUSELAGE AREA. CABIN SIDE PANEL REMOVED FOR INSPECTION AND FOUND BOTH RIGID FUEL LINE FROM WING FUEL TANK TO AIRCRAFT FUEL STRAINER CORRODED AND LEAKING FUEL. NEW RIGID FUEL LINE INSTALLED.

MOONEY	LYC	STRUCTURE	CORRODED	07/02/2002	
M20F	IO360A1A		FUSELAGE	2002FA0000864	

HEADLINER EACH LOCATION THE HEADLINER MATERIAL CAME INTO CONTACT WITH ALUMINUM ATTACH POINTS THE AREA CORRODED THE INTERIOR WAS REPLACED IN THE SUBJECT AIRCRAFT ON MAY 1, 1998 THE CORROSION WAS DISCOVERED DURING MAINTENANCE MAY 17, 2002.

MUDRY	LYC	FITTING	CRACKED	06/21/2002	
CAP10B	AEIO360B2F		WING, LANDING GE	AUS20020629	

(AUS) LANDING GEAR LH FORWARD INBOARD LOWER AND RH FORWARD OUTBOARD LOWER ATTACHMENT BLOCKS CRACKED. FOUND DURING INSPECTION IAWAD/CAP/4A2.

PIPER		ARM	MISRIGGED	07/19/2002	
PA23250		751658	MLG	AUS20020752	

(AUS) EMERGENCY LANDING GEAR EXTENSION SYSTEM CO2 DISCHARGE UNIT LEVER ARM INCORRECTLY RIGGED. PERSONNEL/MAINTENANCE ERROR.

PIPER	LYC	PIN	BROKEN	06/28/2002	
PA23250	IO540C4B5	480700	FUEL SELECTOR/SH	AUS20020658	

(AUS) FUEL SELECTOR ROLL PINS BROKEN. RH FUEL SELECTOR HAD ONE ROLL PIN MISSING.

PIPER	LYC	SPAR	CRACKED	07/23/2002	13800
PA28180	O360*	6697500	HORIZONTAL STAB	2002FA0000921	

HORIZONTAL STAB REAR SPAR CRACKED HALF WAY ACROSS. 5 INCHES ABOVE FUSELAGE. NO SIGN OF BEING HIT OR EXTERIOR DAMAGE.

PIPER	LYC	SPAR	CRACKED	07/26/2002	
PA28235	O540B4B5		WING	2002FA0000873	

DURING ANNUAL INSPECTION SB1006 PERFORMED. FOUND CRACKS AND CORROSION IN AFT REAR SPAR FLANGE-APPROX 3 INCHES OUTBOARD OF LANDING GEAR ATTACH. CAUSE DUE TO STANDING WATER IN WING. FIX BY ADDING DRAIN HOLE IN THIS AREA.

PIPER	PWA		HINGE	CRACKED	07/03/2002	
PA31T2	PT6A135		42059007	MLG DOOR	CA020729005	

(CAN) DURING SCHEDULED 100 HOUR EVENT NR 2 LANDING GEAR INSPECTION, CRACK FOUND ON LEFT HAND FORWARD MAIN LANDING GEAR OUTBOARD DOOR HINGE. CAUSE DETERMINED TO BE FATIGUE.

PIPER			FITTING	CORRODED	06/12/2002	1852
PA32R300				RT WING	S5248	

RIGHT AFT WING ATTACHMENT FITTING CORRODED, INSPECTED IAW PSB977 CORROSION MORE THAN SURFACE DEEP

PIPER			ATTACH	FAILED	05/10/2002	10000
PA34200			6232800	RT TE FLAP	2002FA0000841	

THE OUTBOARD ATTACH POINTS (2) OF THE RT FLAP FAILED IN FLIGHT. INSPECTION OF THE FLAP INTERIOR FOUND THE FAILURE WAS CAUSED BY HEAVY CORROSION AT THE STEEL TO ALUMINUM INTERFACE OF THE FLAP NOSE RIBS AND BRACKET.

PIPER	CONT		CABLE	SEPARATED	06/18/2002	
PA34200T	TSIO360E			ELEVATOR TAB	AUS20020713	

(AUS) FORWARD LH STABILATOR TRIM CABLE DISCONNECTED FROM TRIM WHEEL. BALL END OF CABLE HAD COME OUT OF THE SOCKET ON THE SIDE OF THE WHEEL.

PIPER			BOLT	FAILED	06/26/2002	619
PA38112			AN6H14A401462	RT MLG	2002FA0000861	

RT MLG DEPARTED AIRCRAFT DURING LANDING. FORWARD CLAMP BOLT FAILED CAUSING LANDING GEAR TO ROTATE FROM ITS PROPER LOCATION. BOLT WAS FOUND WITH A SHEAR TYPE FAILURE.

PIPER	CONT		FLANGE	BROKEN	10/30/1998	
PA46310P	TSIO520BE		654327	EXHAUST SYS	2002FA0000788	

PILOT EXPERIENCED LOW MP AT 22K. SLOWLY BLED DOWN AT CRUISE. PILOT SAID AT NORMAL 25 INCHES, IT BLED DOWN TO 22 INCHES WITH FUEL THROTTLE. UPON CHECK MECHANIC NOTED EX STAINS ON R/CYL BANK AND DISCOVERED FLANGE COMPLETELY SEPARATED AT TURBO FLANGE AREA EXHAUST MANIFOLD. NEW PART ORDERED AND REPLACED.

PIPER	LYC		MOUNT	BROKEN	06/04/2002	1835
PA46350P	IO540*		8193702	ENGINE	2002FA0000787	

FAILURE DURING LANDING. ENGINE MOUNT REVEALED THAT THE RIGHT SIDE OF THE NOSE GEAR ACTUATOR, AFT ATTACH POINT, HAD SEPARATED FROM THE TUBE CLUSTER ON THE MOUNT ASSEMBLY.

SCWZER	PWA		ROCKER SHAFT	DEPARTED	06/01/2002	185
G164B	R1340*		45937	ENGINE	2002FA0000781	

WHILE FLYING, NR 3 ROCKER SHAFT ON EXHAUST VALVE EXITED THE AIRCRAFT CAUSING THE ENGINE TO LOSE POWER. AIRCRAFT MADE A FORCED LANDING INTO A PLOWED FIELD CAUSING THE AIRCRAFT TO FLIP OVER. THE ENGINE HAD 185 HOURS SINCE OVERHAUL, PART COULD NOT BE FOUND, BUT SUSPECT IT FAILED IN THE THREAD AREA NEXT TO THE SMALL NUT.

SKRSKY			BLADE	CRACKED	06/10/2002	7686
S61N				MAIN ROTOR	ERAA080333	

MAIN ROTOR BLADE HAS CRACK IN POCKET NR 9 FROM ROOT END ON BOTTOM. ACTION TAKEN: REPLACED POCKET NR 17, NR 20 REPLACED O/B ABRASION STRIP, REPLACED RUBBER CAP, TOUCHED UP, AND BALANCED, CHANGED SPAR, REPLACED NUT PLATE.

SKRSKY			TIP CAP	ERODED	06/11/2002	
S76A			7615009043050	M/R BLADE	HEEA079891	

FIBERGLASS SKIN ERODED. INTERNAL DOUBLER UNBONDED, FIBERGLASS BETWEEN ENTER AND OUTER DOUBLER

SKRSKY			TIP CAP	CRACKED	06/10/2002	1610
S76A			7615009043050	M/R BLADE	ERAA080332	

TIP CAP IS CRACKED. FORWARD INTERNAL DOUBLERS VOID. ACTION TAKEN: REPLACED INTERNAL FWD DOUBLERS AND REBONDED C-CHANNEL, REFINISHED PAINT AND STATIC BALANCED.

SNIAS	TMECA		CABLE	FRAYED	07/10/2002	
AS332L	MAKILA1A		704A34130103	TAIL ROTOR	AUS20020711	

(AUS) LH REAR TAIL ROTOR CONTROL CABLE CONTAINED BROKEN STRANDS IN AN AREA WHERE THE CABLE PASSES THROUGH FAIRLEAD. FAIRLEAD INSPECTED AND FOUND SERVICEABLE.

SNIAS	TMECA	TMECA	DRAIN VALVE	FAULTY	07/17/2002	
AS350B	ARRIEL1B	ARRIEL1B	0174078030	ENGINE START VAL	AUS20020708	105

(AUS) ENGINE START DRAIN VALVE FAULTY.

SNIAS	TMECA	TMECA	PUMP	FOD	06/27/2002	
AS350B	ARRIEL1D	ARRIEL1D1	9505	TURBINE ENGINE O	AUS20020632	

(AUS) ENGINE OIL PUMP INLET FOD. INVESTIGATION FOUND A SMALL PIECE OF RUBBER TUBING LODGED IN THE OIL PUMP INLET, RESTRICTING OIL FLOW TO THE PUMP. ENGINE WAS BEING GROUND RUN FOR INSTALLATION FOLLOWING REPAIR. PERSONNEL/MAINTENANCE ERROR.

SNIAS			OIL FILTER	MISMANUFACTURE	06/25/2002	
AS350B2			32030004	M/R GEARBOX	2002FA0000862	

MAIN GEAR BOX OIL FILTER USED ON CERTAIN A/C HAVE A TAB TACK WELDED TO THE FILTER CASING SO SAFETY WIRE CAN BE ATTACHED. ON 5/30/02, 3 OF THESE FILTER HAD THE SAFETY WIRE TABS FALL OFF BEFORE THE FILTERS WERE INSTALLED. MFG WAS NOTIFIED OF THIS PROBLEM.

SNIAS	TMECA	TMECA	IGNITER	UNSERVICEABLE	07/17/2002	
AS350BA	ARRIEL1B	ARRIEL1B	9550168760	SPARK PLUG/IGNIT	AUS20020749	

(AUS) ENGINE IGNITER CENTER ELECTRODE MISSING. IMPACT DAMAGE ON FIRST STAGE TURBINE AND FREE TURBINE BLADES.

UNIVAR	FRNKLN		ENGINE	SHUTDOWN	07/15/2002	
1083	6A4165B3			NACELLE	2002FA0000847	

ENGINE SHUT DOWN ON CLIMB OUT AT APPROX. 80 FEET, ALTITUDE. VISUAL EXAMINATION REVEALED NO OBVIOUS REASON FOR THE FAILURE. FUEL VENTING AND QUANTITY WERE COMPROMISED BY THE CRASH IMPACT AFTER RECOVERY EFFORTS WERE COMPLETE FUEL WAS PUT IN THE RIGHT WING TANK AND THE ENGINE WAS EASILY STARTED AND RAN WITH NO MALFUNCTIONS.

OMB No. 2120-0003

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

MALFUNCTION OR DEFECT REPORT

OPER. Control No.	
ATA Code	
1. **A/C Reg. No.**	**N-**

Enter pertinent data	**MANUFACTURER**	**MODEL/SERIES**	**SERIAL NUMBER**
2. **AIRCRAFT**			
3. **POWERPLANT**			
4. **PROPELLER**			

5. SPECIFIC PART *(of component)* CAUSING TROUBLE

Part Name	MFG. Model or Part No.	Serial No.	Part/Defect Location.

6. APPLIANCE/COMPONENT *(Assembly that includes part)*

Comp/Appl Name	Manufacturer	Model or Part No.	Serial Number

Part TT	Part TSO	Part Condition	7. Date Sub.

8. Comments *(Describe the malfunction or defect and the circumstances under which it occurred. State probable cause and recommendations to prevent recurrence.)*

Optional Information:

Check a box below, if this report is related to an aircraft

☐ Accident; Date _____ ☐ Incident; Date _____

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